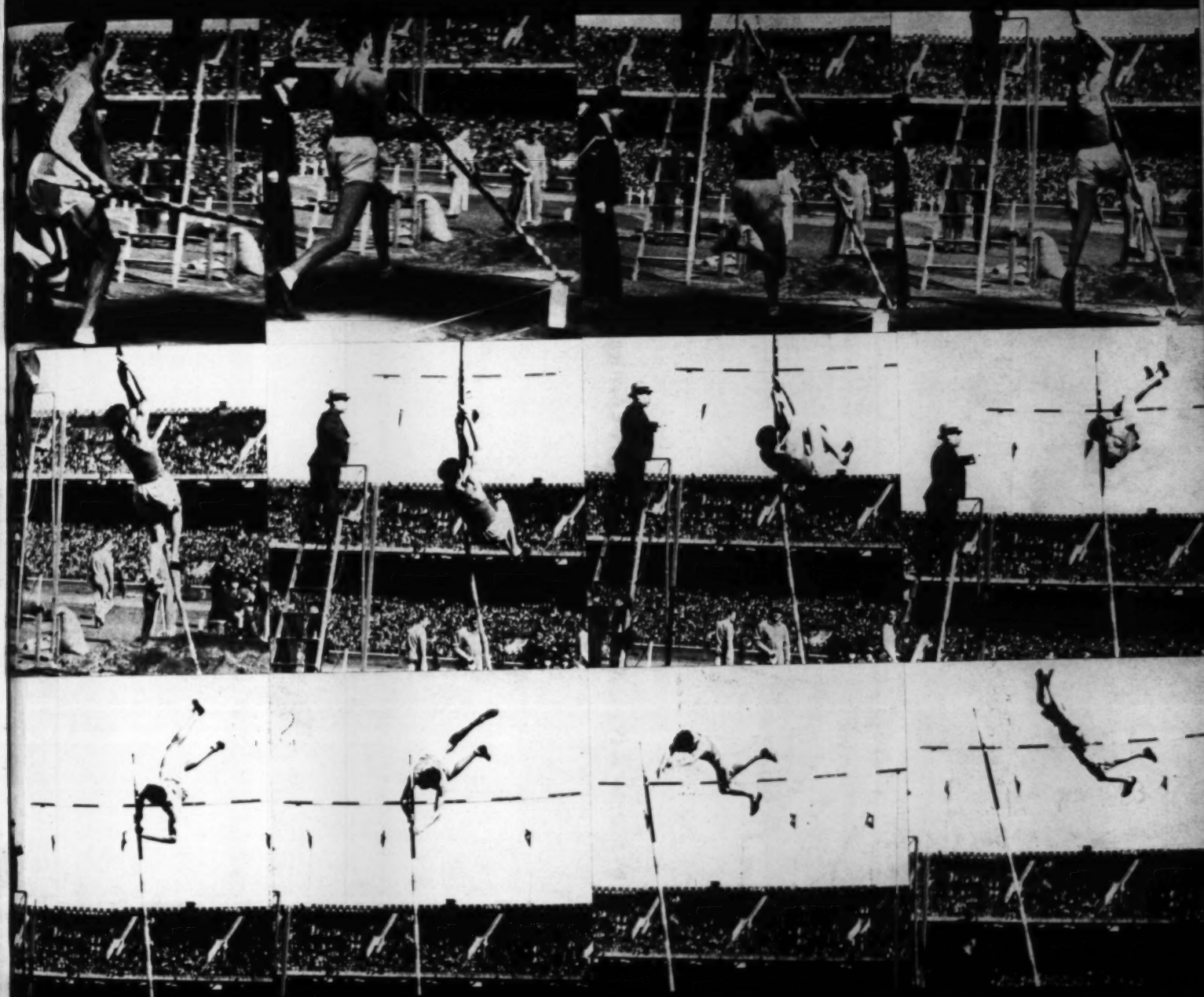


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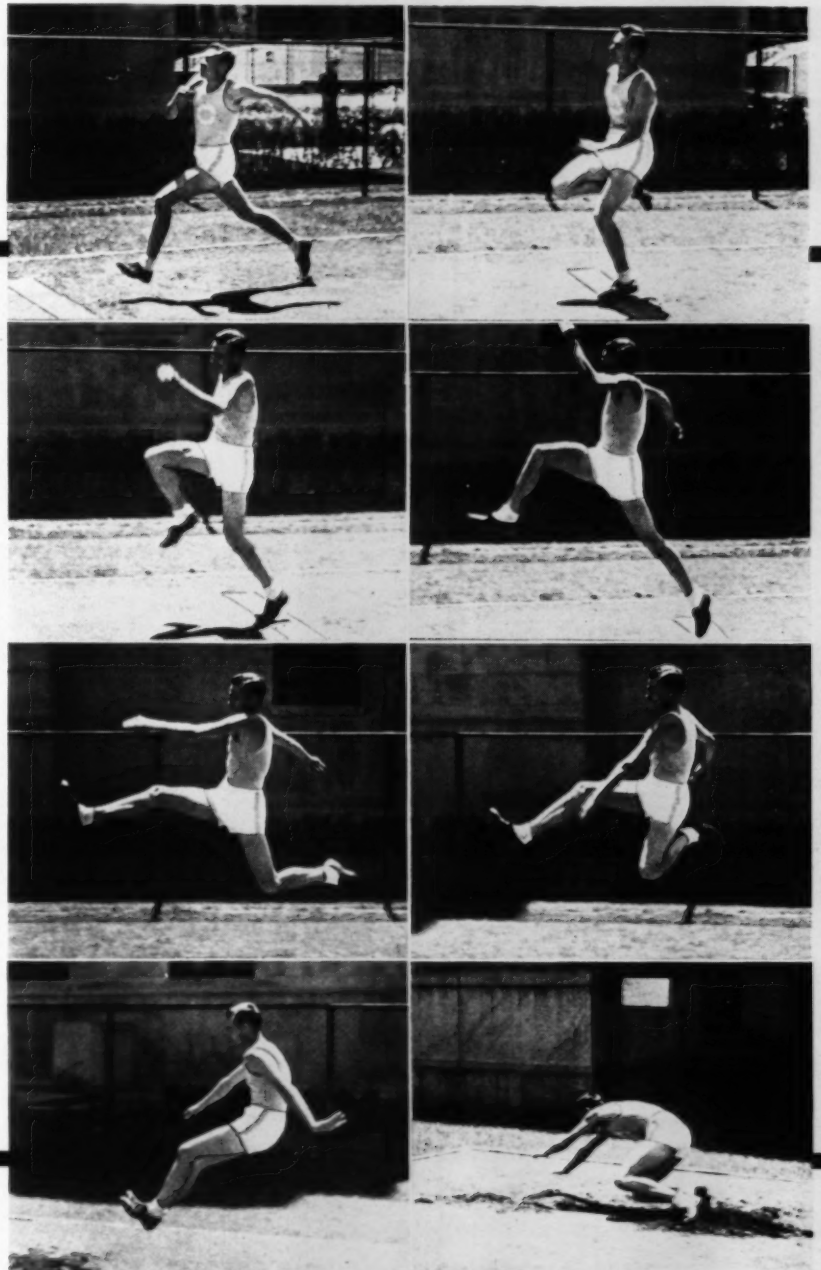
DEAN CROMWELL
Track Coach
University of Southern California

SOME POINTERS ON THE BROAD JUMP

By DEAN CROMWELL

● As the jumper approaches the take-off board at full speed, he stamps down hard on the left foot and takes off on the right. The step is as long and powerful as he can make it.

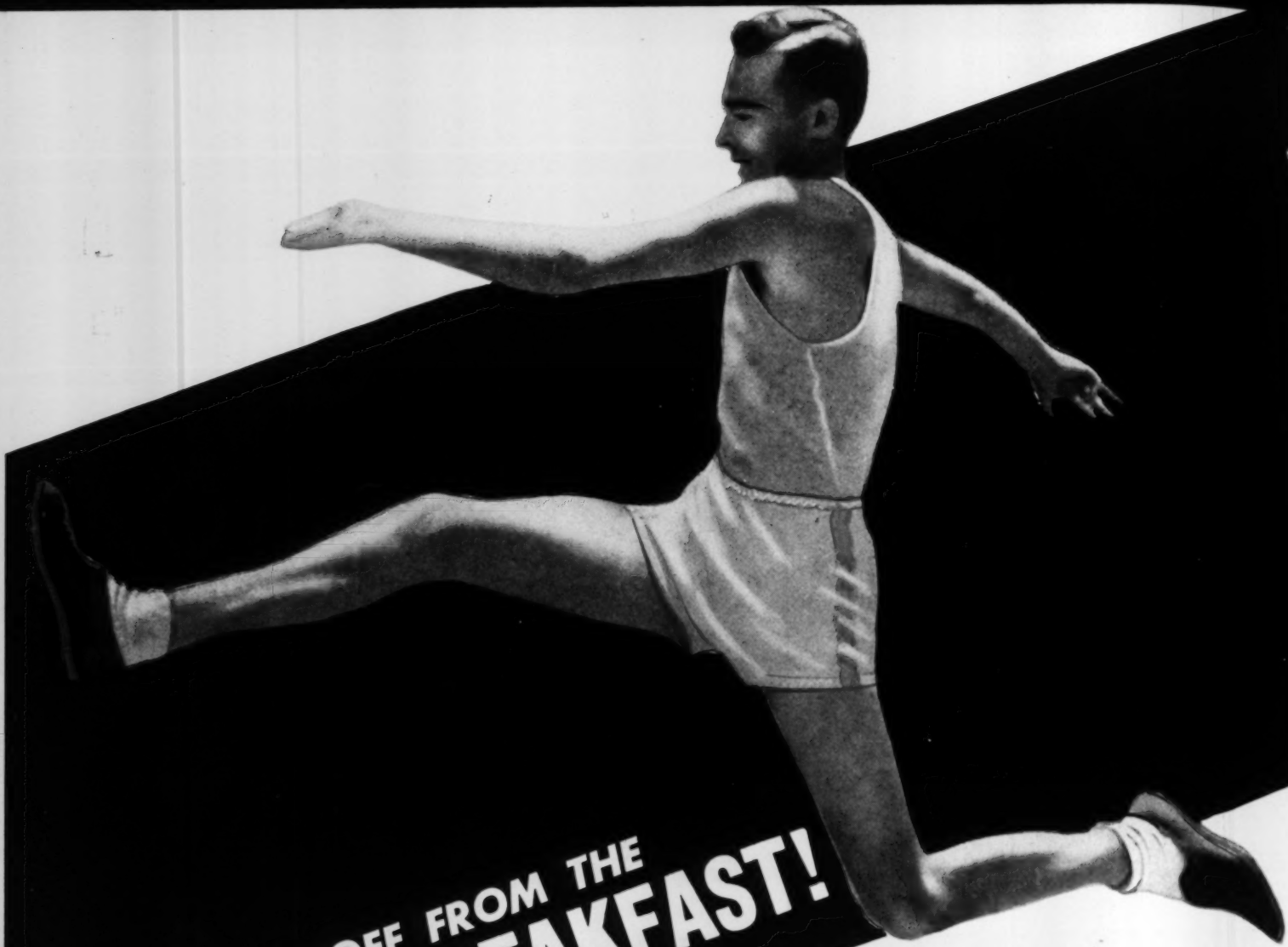
As he "floats" through the air, the head is erect and the left arm outstretched. The right arm (that was trailing) comes forward as he starts dropping into the pit and the left leg comes even with the right. To avoid falling backward in the landing, the weight must be shifted ahead of the feet.



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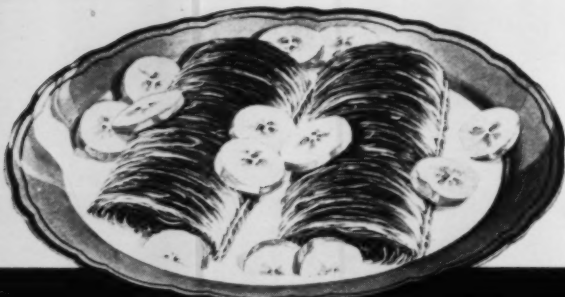


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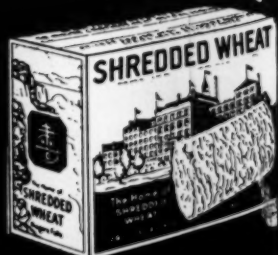
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SCHOLASTIC COACH

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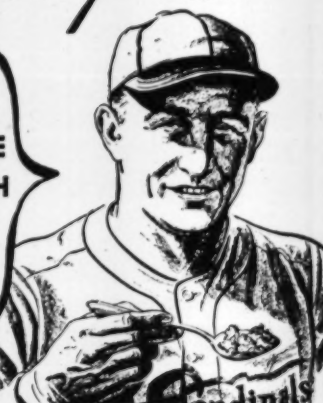
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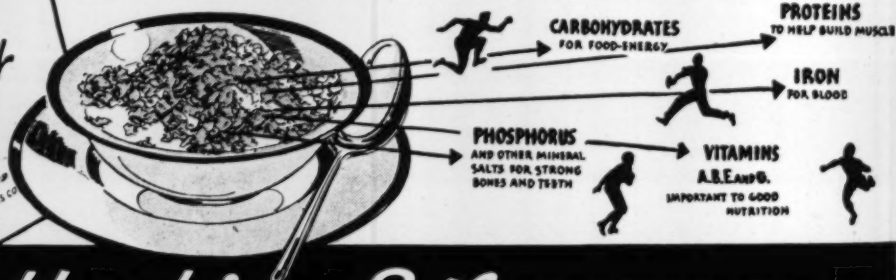
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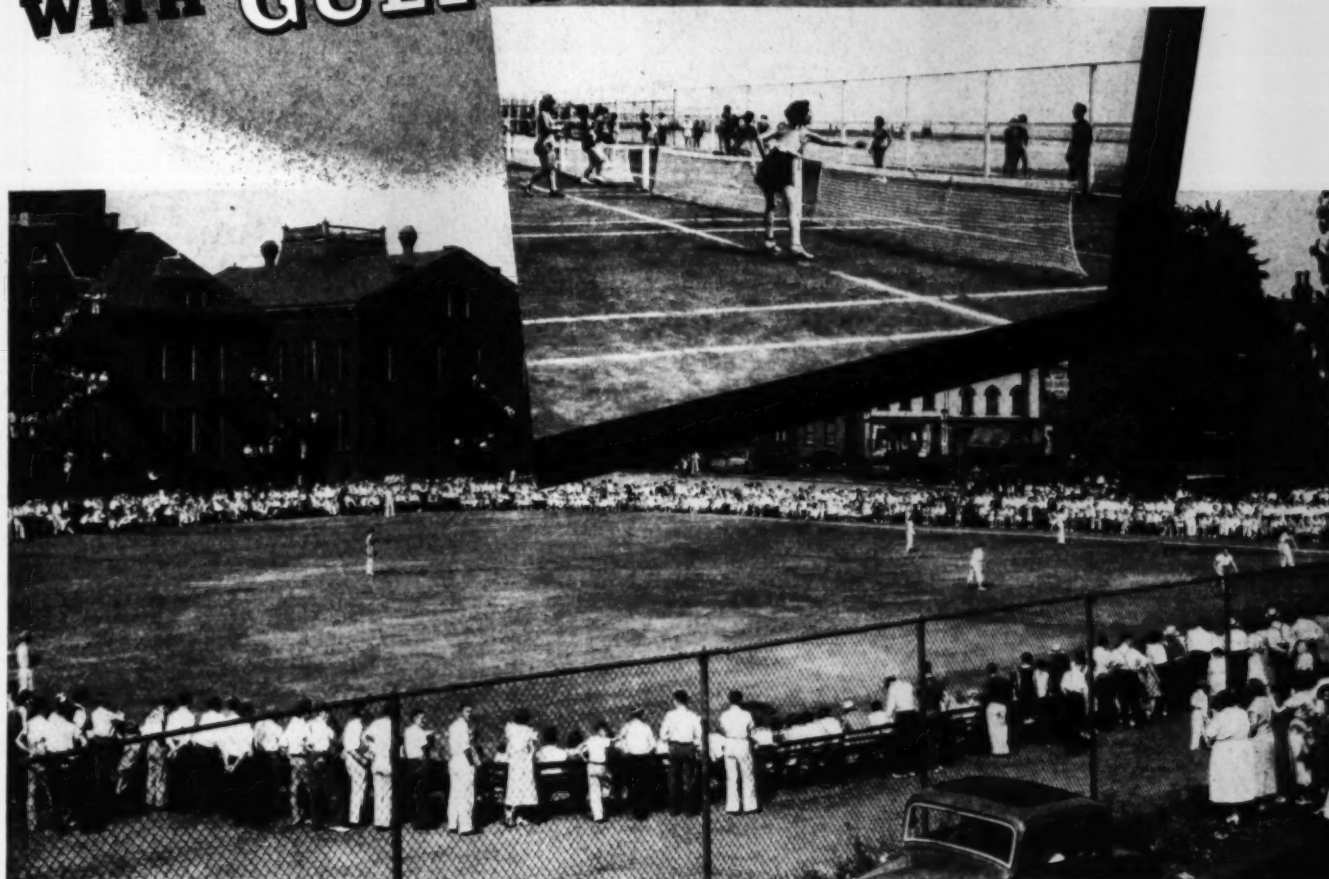
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VOIT SPORTS EQUIPMENT

Here Below

ABOUT this time of the year, the couriers of Mr. Farley stack high our mail boxes with laments about how (a) the zone defense is swiftly and surely leading the game of basketball along the road to ruin and (b) if the zone defense isn't, then the elimination of the center jump is. This constitutes about fifty percent of our mail. The rest of our correspondents tell us that (a) the zone defense is the hand of the Lord working in behalf of poor undermanned coaches, and (b) the elimination of the center jump has been a tonic to the game.

So you can readily understand how surprised we were the other day to receive a letter that had nothing whatever to do with pros and cons of the zone defense, etc. What's more, the letter was so intriguing that we are here passing it on to you, *in toto*. Gentlemen:

I am sure that coaches' wives read your magazine, and since a wife often makes or breaks a coach, I think it is only fair to give them some attention in your columns. My idea would be to write a special column each month discussing our peculiar problems and adding suggestions and comments which, I believe, would be sent in by other coaches' wives.

I am enclosing copy for the first of these columns. Very truly yours,

A coach's wife,
Louise M. Matulis (Mrs. "Tony")

HOWDY, gals! Time we had a little something to say in this magazine. My opinion is that it's just as important to know how to be a good coach's wife as it is to be a good coach. Many a game has been won by a pre-game feed, a final word of wifely encouragement, or a bit of "player-mothering"—all the work of Mrs. Coach.

What kind of wife are you? Long before I was a coach's wife, I had as an ideal one of the finest women I've ever known. She was the perfect wife for a coach: keen, alert, friendly, interested, cooperative. She never missed a game; she was always ready to befriend a "down-at-the-heels" athlete; she managed her home and her children capably; encouraged her husband win or



St-r-i-i-ke tuh!! Neither snow nor death-dealing missiles nor the lack of a catcher's mask can stop these Japanese soldiers from indulging in a game of baseball behind the lines in China.

lose, and set an example by being the best sport of all.

Her husband was affectionately known as "Punk," and no queenly title was ever bestowed with greater respect than her own nickname of "Mrs. Punk." She is one of the few people I have ever known who drew nothing but praise from everyone; I have never heard a harsh word spoken against her.

In spite of this ideal, I know that I am not the perfect coach's wife. I know that others of our sisterhood must have groaned with me as dinners get cold or, just as bad, are hastily gulped before a game. It takes more than will power and a sweet disposition to look pleasant when friend husband "takes it out on the family" when a player gets ornery or ineligible.

One of my biggest problems is finances. Ever hear that one before? Our pay check is never large enough, and some occasion for entertaining is always popping up. Our athletes are mostly husky farm lads, and I contend that novelty and entertainment are more important to them than a big feed. So I stress the unusual in my parties. For instance, I have an annual spaghetti feed that causes talk and

anticipation from the beginning of school until the end of the first semester, when it is held. I make gallons of spaghetti, and serve mounds of rye and French bread, dill pickles, cabbage slaw, hot drinks, and huge slabs of pie. The cost is minimum, but the fun is maximum.

I use original ideas in the invitations, in place-card-ice-breakers, in choice of card games that allow them to let off steam verbally but still go easy on my furniture. They eat by themselves, but I join the crowd later in the evening. The boys like me, but even if they weren't too enthusiastic about my presence, I think I'd appear. This is a

community which lacks some of the social amenities, and it's a good object lesson for the boys to see their idol, the coach, treat his wife with consideration and respect, and to think of me as a companion and friend—not just the person in the kitchen who feeds them.

WHAT this country needs is more coaches' wives like Mrs. Matulis. Like Betsy Ross and Florence Nightingale, she is indeed a pearl without price. It is women like her who come to the rescue of Mr. Coach for his big game, not with a basket from 45 feet out but by spurring the boys on with visions of a steaming dish of ravioli and a slab of the kind of pie that mother used to make. (After the season, of course.)

Mrs. Matulis is going to tell about it in *Scholastic Coach* every now and then. But first for the details of our super-colossal contest. As we have been sorely puzzled in our efforts to select an adequate title for Mrs. Matulis's column, we are calling in our readers to help us out. The reader who suggests the best title will be awarded a prize of ten dollars.

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TIPS FOR HIGH SCHOOL BATTERS

By George Jacobs

Distance a ball will travel depends upon proper timing between the speed of the ball and the speed of the bat

George "Doc" Jacobs turns out the excellent Villanova College nines which have made the Pennsylvania school a power in Eastern baseball circles. Scientific and progressive in his methods, the author has devised a unique portable mirror to aid him in his work on batting fundamentals.

BATTING is the backbone of baseball. No matter how good a team may be defensively, it can seldom win consistently if the players are weak in batting. To some players batting comes naturally; by others it is learned only after constant practice and determination. It has been said that confidence is 50 percent of the art, but confidence comes only with the ability to bat. Therefore the technique of batting revolves itself into a formula consisting of a clear eye, determination and good form.

The first lesson the batter should learn is to hit where the ball is pitched; inside balls should be hit to left field and outside balls to right. This applies to right-handed batters. Left-handers should hit inside balls to right field and outside pitches to left.

With this idea firmly planted in the boy's mind, we can proceed with the fundamentals of good batting: (1) Stance and balance. (2) Timing, stride and step. (3) The grip and swing. (4) The follow through. All of these fundamentals can be acquired and together with a good eye, average physical make-up and confidence form the requisites of good batting.

Stance and balance

Stance and balance are combined because balance becomes a factor in batting the moment you assume your position in the batter's box. The stance at the plate varies with different batters. The batter should stand at the plate in a free and easy manner with his legs spread as far as is comfortable for him, his shoulders and hips on a parallel line and with the weight of his body equally distributed on both feet.

Timing is perhaps the most important fundamental of good batting. It can be defined as the act of bringing the bat around to the proper place (in front of the batter) at the right moment to make contact with the ball. The distance a ball will travel depends directly upon proper timing between the speed of the ball and the speed of the bat. Imperfect timing



The mirror doesn't lie: the batter sees for himself the flaw in form Coach Jacobs is pointing out.

results in slow ground balls or weak pop flies. It is the difference between being just a fair hitter and a good one.

The stride has a great bearing on perfect timing. By stepping out too far, the power of the body is wasted before bat meets ball, and you are hitting late. With too short a stride, you do not get the maximum power of the body behind the bat as it meets the ball. As a result, the ball is hit too soon. In proper timing, the bat meets the ball just as the stride is completed.

Some players confuse the terms stride and step. The difference is: (1) The stride is the distance that separates the feet. (2) The step is placing the front foot in the direction you want the power of the bat to go. On inside balls, step away slightly and pull the ball. On outside balls, step in so that the weight of your body goes toward the ball.

Grip and swing

The position of the hands on the bat varies with the individual batter. Some grasp the bat at the end; others, two or three inches from the end. In either case, the hands should be held together.

Right handers should hold the bat firmly with the left hand but not so

tightly with the right. Left-handed batters should reverse this grip. Bring the bat as far back as possible, on a level with the shoulders, keeping the elbows away from the body and the bat motionless.

The swing should be even with the ball. When striking at balls "down the alley," try to keep the bat level with the ground. On low balls, use the golf swing.

The follow through is the normal completion of the swing after bat meets ball. This fundamental is important because it helps in getting distance to your drives after the initial contact. The bat is picking up speed when it meets the ball. The swing should be continued as if the batter was trying to hit some object in the rear.

Mirror system

At Villanova we have adopted a mirror system to overcome batting faults and teach proper form. For the past two years we have been using two large portable mirrors. Each is 60 inches wide and 48 inches deep, set in wooden frames that can be raised or lowered on iron uprights. These uprights, in turn, are set in concrete rollers, making it easy to arrange the mirrors at almost any

(Concluded on page 35)

TRAINING FOR MIDDLE DISTANCE RUNNERS

By Bowman Hall

The cultivation of good form, which induces economy of effort, is important in the conservation of energy

Bowman Hall's article on middle-distance running is practically a manual on this phase of track and field; the author covers form, endurance, training, warming up, staleness and rest, and tactics—all with careful thought to the physiological implications of his subject matter. An experienced middle-distance runner (Michigan Normal College), Hall is also a keen student of the physiology of exercise.

UNDENIABLY, there are factors other than sheer speed that are involved in running distances greater than the sprints and the quarter-mile. In the half-mile and mile events it is endurance that counts in the final analysis. For no matter how far ahead the runner may be in the first three or four hundred yards, if he cannot maintain a steady pace throughout the race, his cause is lost. Of course this does not mean that the middle-distance runner is only a plodder, for many of the outstanding half-milers possess a considerable degree of natural speed, an invaluable asset.

Williams and Nixon in their book, *The Athlete in the Making*, present an interesting discussion on endurance and how to train to acquire it. Since this topic is so important, let us get a clear idea of what it is and what it involves. It may be said that endurance is an adjustment on the part of the human body in which the onset of fatigue, caused by participation in physical activity, is delayed.

In the case of the middle-distance runner, fatigue is caused by failure of the circulatory system to carry off the waste products of exercise and to carry a sufficient supply of oxygen to the muscles involved. From this then, we see that any discussion of endurance must include a consideration of the heart and the circulatory system.

The heart is a specialized type of muscle tissue and may be strengthened and conditioned just as any other muscle. When so conditioned it is able to pump the blood through the system more efficiently and with fewer beats. Once the heart has been gradually and carefully strengthened it is practically impossible to injure it, indeed some authorities believe that collapse from fatigue would precede any injury.

At this point it might be well to stress the importance of a thorough medical examination of all candidates for athletic teams prior to starting a season of practice and competition; there may be some in-

cipient cases of heart disease. This type of heart would not be benefited, and might be injured, by strenuous participation in athletics.

Experiments in the physiology of exercise show that as a rule middle-distance runners have a very low pulse rate. A brief consideration of this will show why individuals with a low pulse rate are apt to succeed in these two events. If the normal rate of the heart is fifty beats per minute then, when it has increased to one hundred and fifty beats per minute, three times the amount of blood, and a corresponding increase in the quantity of oxygen, is pumped around the system. On the other hand if the normal pulse rate is seventy-five beats per minute then only twice the volume of blood is pumped out when the rate has increased to one hundred and fifty beats per minute.

Form and endurance

Since endurance is so vital a factor in middle-distance running, then it necessarily follows that the cultivation of good running form, which induces economy of effort, is of paramount importance. A rhythmic stride, well-balanced body carriage and a smooth effortless arm action have the added advantage that their very rhythm will often carry a runner through, even after fatigue sets in.

Middle-distance runners should land on the back part of the ball of the foot. In the mile run many of the best milers have a slight, imperceptible touch of the heel in each stride. This is restful to the muscles in the calf of the leg. The toe should point straight ahead or slightly inward—never outward—in landing. The knee lift is less pronounced than in the quarter-mile and even less in the mile than in the half-mile. The important thing about the stride is to get a good foreleg stretch and to avoid over striding and kicking the heels too high behind. The length of the stride should be dictated by comfort.

A good plan to follow in cultivating the correct lean of the body is to keep the eyes focused on the ground at a point some ten or twelve yards in advance of the body. In this way the lean will automatically regulate itself with regard to the speed at which the athlete is running.

A correct body carriage will per-

mit a maximum stride and will avoid unnecessary strain in the neck and shoulder muscles, thus minimizing the possibility of their "tying up." Again the arm carriage should be dictated by comfort, they should swing forward and back easily and should not be used for purposes of propulsion any more than is necessary until the start of the final drive for the tape. In training for form relaxation should be the watchword as in this way the demand on the heart for oxygen by the muscles will be considerably lessened.

Training

Remembering that the heart must be gradually strengthened and built up to the point where a supreme effort can be safely made, the proposed training schedule must be planned so that the workouts gradually increase in length and severity. If cross-country running is a school sport during the fall, an excellent opportunity is afforded the runner to improve the general health as well as strengthen the heart and muscles for the later competition in the half-mile and mile.

Should facilities for indoor track practice be available, middle-distance runners can profitably commence their practice a month or more before the opening of the outdoor season. This pre-season period should consist of body-building exercises, especially from the hips up, and of light running at one-half to three-fourths speed. A general practice is to run a quarter of a mile at this pace, walk a quarter and then run another quarter mile. As the athlete's condition improves he can increase the length of the workouts until he is covering one and one-half or two miles in this manner.

If no indoor track is available the body-building exercises can be accompanied by rope skipping and stationary running—or running in place as it is popularly known. W. G. George, the great English miler of some years ago, used this latter exercise to advantage, and it has also been used by Olympic athletes while on shipboard going to the Games.

Once the athlete is in condition he can concentrate on the following procedures, with the work planned to meet his particular needs and abilities: one and one-fourth to one and one-half times his regular distance at one-half or three-fourths speed to develop endurance; distances from one-fourth to

one-half his regular distance for speed and development of ability to judge pace; and finally time trials at three-fourths the distance and the regular distance at three-fourths to seven-eighths speed for gaining experience and familiarity with the racing distance.

Running time trials over the regular distance should be avoided as much as possible in practice. All strenuous efforts should be saved for the race. In addition to the main workout, the athlete should take a thorough warm-up and practice sprinting and starting every day.

Warming up

Many coaches and athletes fail to realize the benefit of a good warm-up for middle-distance runners. Everyone is familiar with the phenomenon known as "second wind," in which the competitor experiences a relief from the condition that almost forced him to stop from fatigue. This phenomenon is an adjustment on the part of the circulatory and respiratory systems to meet conditions caused by increased waste products and insufficient oxygen.

Naturally the sooner this relief comes after the start of the race, the more efficiently the body will respond to demands made upon it.

The surest way of hastening the coming of "second wind" is by a thorough warming up about twenty to thirty minutes prior to the start of the event. By preceding the race with a warm-up, the percentage of carbon dioxide in the blood is increased and in turn the respiratory center of the brain is stimulated with

(Concluded on page 32)

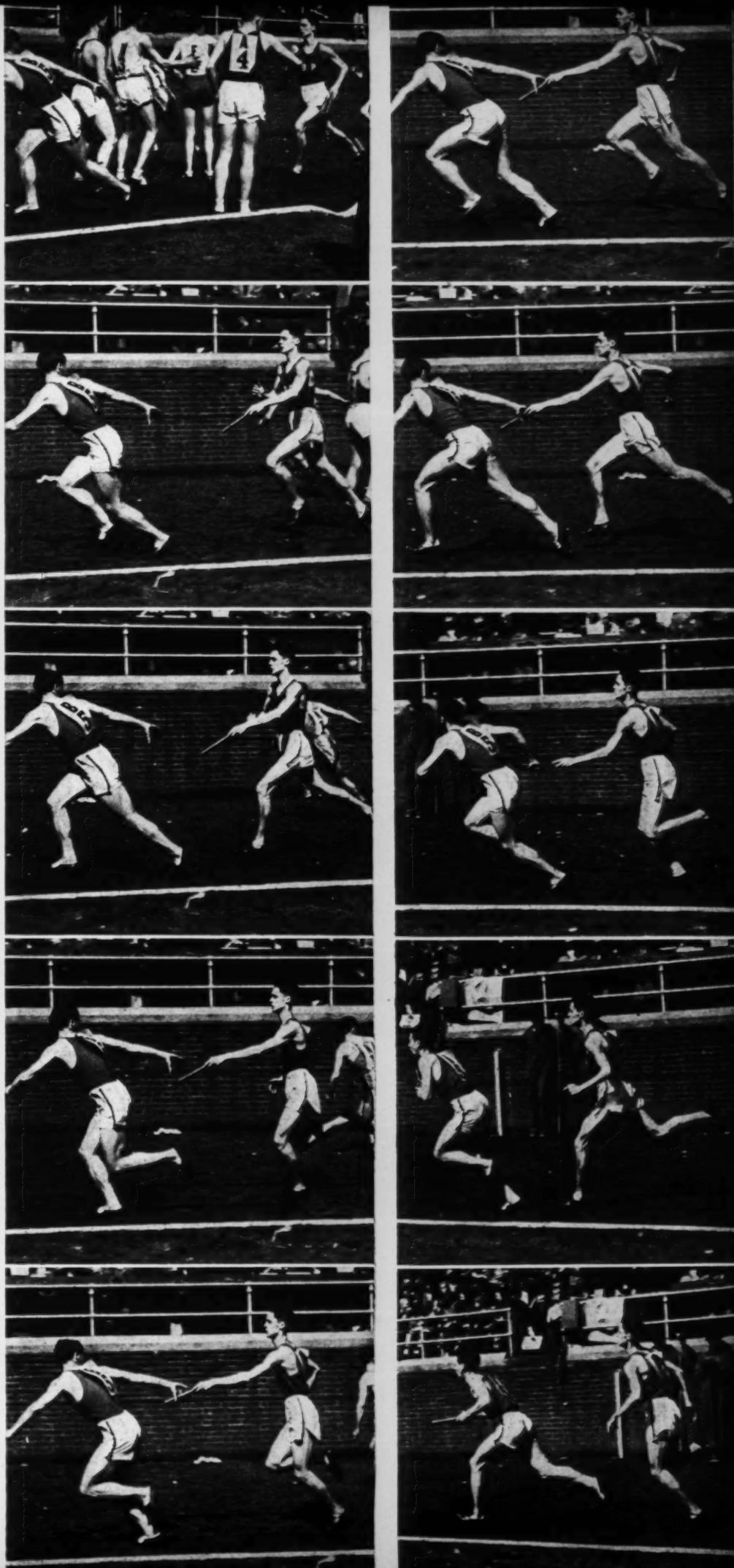
Passing the Baton

When relay teams of equal ability are matched, the race invariably is won or lost on the respective abilities of the teams to transfer the baton deftly and without slackening speed. The two most accepted methods of exchange are the visual and non-visual styles. For races over the longer distances, the visual method is recommended because the passer may be in distress when he reaches the next man and cannot always be relied upon for a sure pass.

In these competition pictures of a one-mile relay, the awaiting receiver has his eyes focused on the baton even while he is taking his preliminary strides in the passing zone. His right arm is fully extended close to the level of the hips with the thumb and palm down. Carefully he gauges the speed and strength of his teammate and attempts to adjust his stride so that the pass will be completed with both men running, as close as possible, at equal speed.

The passer closes in until he is about two strides away from the receiver and then with a slight upward thrust of the fully-extended left arm, slips the baton into his teammate's hand.

The receiver grasps the baton well up on the farthest end, so that when he transfers the baton from the right to the left hand during the first stride, he will have ample surface to grip it.





ANALYSIS OF THE SPRINT START

By W. W. Tuttle and George T. Bresnahan

There is an important coaching point involved in this analysis by the two University of Iowa men, of the time during which power is applied by the legs in the start of the sprint. Co-authors of *Track and Field Athletics*, W. W. Tuttle, Ph.D., is an associate professor of physiology and George T. Bresnahan, who has long been active in the field of tests and measurements, is track coach and assistant professor of physical education.

BY EXPERIMENT, Bresnahan demonstrated that when a sprinter leaves his marks a very definite movement sequence is followed.¹ Kistler has proven also that the body of the sprinter at the start is driven forward by a vigorous extension of both legs.² Another important point involved in the sprint start, and closely allied to force and sequence of movement, is the time intervals during which force is applied by the legs. This time factor in the drive off the marks is the purpose of the following investigation.

The apparatus and experimental procedures employed in the present study were essentially the same as those used by Bresnahan in his investigation of the sequence of movements when starting the sprint from a crouched position. Briefly, the apparatus was arranged as follows:

1. In order to record the exact moment the gun was fired at the start of the race, a sound key was placed in series with two dry cells and a signal magnet. When the gun was fired, the sound key circuit was opened, thus causing the stylus of the signal magnet to move.

2. Modified starting blocks as described by Tuttle and Bresnahan³

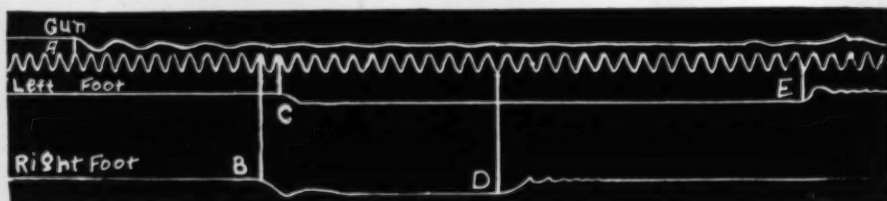
were employed for recording the instant at which force was applied at the start, after the gun was fired. This arrangement also provided means for determining when each leg ceased applying pressure, as the sprinter left his marks. The starting block was modified by equipping it with a facing, held against an electric contact by two springs placed between the facing and the block. The facing moved less than 2 mm.

The electric contacts on the modified block were placed in series with two dry cells and a signal magnet. The instant of the application of

was spun by hand and all four styli were accurately placed in a perpendicular plane.

The procedure followed in obtaining the records was as follows: The sprinter arranged the starting blocks so that they were spaced for a natural start. When the blocks were adjusted, the official started the sprinter in the orthodox manner. When the experimenter heard the command "get set" he began to spin the drum, continuing to do so until the sprinter was off his marks.

A record obtained from the procedure just described accompanies the



KYMOGRAPH RECORD: Reproduction of record made on a smoked drum, showing movement sequence and relative time during which force is applied by the legs at the start of the sprint.

force was easily obtained, since, as soon as the sprinter applied pressure to the block, the electric circuit was opened, thus causing the signal magnet stylus to move. Likewise, as soon as the sprinter ceased applying pressure to the block, the electric circuit was closed, thus activating the signal magnet. A modified block was used for each foot.

The record of the application of force was made on a smoked drum by means of a standard extension kymograph. In order to determine time relationships, a 100 d.v. electrically driven tuning fork, equipped with a recording stylus, was placed between the sound stylus (see kymograph record) and the front (left) foot stylus. The kymograph drum

article. The first break in line (A) indicates the firing of the gun. The wavy line between the line marked "gun" and that marked "left foot" is the tuning fork record. The point marked (C) in the front (left) foot line shows where the pressure was applied by the left foot while the point marked (E) in the same line shows where pressure against the block was terminated. Point (B) in the right (back) foot line shows when the pressure was applied and point (D) in the same line indicates a cessation of pressure. The sprinter placed his right foot back.

The data shown in the kymograph record are interpreted as follows:

1. The right leg began applying pressure to the block .11 s. after the gun was fired.

¹ Bresnahan, Geo. T. *A Study of the Movement Pattern in Starting a Race from the Crouch Position*. Supplement to the Research Quarterly of the American Physical Education Assn., V: 1 (March, 1934) 5-11.

² Kistler, J. W. *A Study of the Distribution of the Force Exerted Upon the Blocks in Starting the Sprint from Various Starting Positions*. University of Iowa Studies in Physical Education, No. 1 pp. 26-32. (Supplement to Research Quarterly A.P.E.A. V, 1934.)

³ Tuttle, W. W. and Geo. T. Bresnahan. *An Apparatus Used for Measuring Starting Time in Foot Races*. Research Quarterly A.P.E.A. IV: 2 (1933) 110-116.



2. The left leg began applying pressure to the block .12 s. after the gun was fired.

3. The right leg began applying pressure to the block .01 s. before the left.

4. The right leg applied pressure to the block continually for .125 s.

5. The left leg applied pressure to the block continually for .275 s.

6. The left leg applied force to the block 2.2 times longer than the right.

7. Starting time¹ on the basis of right leg movement is .235 s.

8. Starting time on the basis of left leg movement is .395 s.

Although the forward movement of the body is initiated by the back leg, the body receives the greater part of its forward propulsion from the left leg. The data secured from all records were analyzed in the same manner.

Summary of data

Data were secured from 285 records made by 29 varsity sprinters, all of them starting with their right foot back. A summary of these data is shown in Table 1. On the basis of means, the data show the following:

1. The right leg began applying pressure to the block $.1264 \pm .0021$ s. after the gun was fired.

2. The left leg began applying pressure to the block $.1420 \pm .0025$ s. after the gun was fired.

3. The right leg began applying pressure to the block $.0156 \pm .0021$ s. before the left. (This difference is 34.33 times its probable error, thus indicating that a true difference exists between the initial application of pressure by the front and back legs and that the back leg applies pressure first.)

4. The right leg applied pressure to the block, continually for $.1543 \pm .0036$ s.

5. The left leg applied pressure to the block continually for $.2962 \pm .0040$ s.

(Concluded on page 40)

CURRENT WORLD'S FASTEST HUMAN: Eclipsing the fastest performances of Jesse Owens, Ralph Metcalfe and a long line of other great American speed men, Ben Johnson broke all records for sixty yards early last month in Madison Square Garden with an incredible .6s. flat. With an uncanny ability to get off his marks, Johnson is virtually unbeatable over the shorter sprints. Note the powerful leg drive and long body lean as he leaves the holes. The back leg starts forward at the conclusion of the push-off and the right arm, slightly bent, swings backward to about shoulder level. In the last picture he is almost floating on air as he completes the stride. While in action, Johnson's head, shoulders, arms, knees and toes are moving in a straight line. The Columbia University ace is 5 ft. 7 in., weighs 150 lbs.

TABLE I

This table is a summary of 285 starts made by 29 sprinters, showing the time relationships in the application of force against the blocks by the legs at the start of the sprint.

Subject No.	No. of starts	Time between "gun" and initial application of pressure.			Total time during which pressure is applied		Time between "gun" and release of pressure	
		Back foot A-B*	Front foot A-C	Diff.	Back foot B-C	Front foot C-E	Back foot A-D	Front foot A-E
1	9	.107	.117	.010	.168	.334	.275	.451
2	7	.123	.158	.035	.122	.307	.245	.465
3	16	.101	.108	.007	.161	.300	.262	.408
4	12	.130	.139	.009	.141	.310	.271	.449
5	10	.129	.132	.003	.180	.259	.309	.391
6	10	.114	.124	.010	.093	.292	.207	.416
7	11	.155	.159	.004	.129	.288	.284	.447
8	11	.157	.139	-.018	.108	.291	.265	.430
9	10	.121	.133	.012	.139	.237	.260	.370
10	7	.108	.168	.060	.175	.286	.283	.454
11	9	.118	.148	.030	.171	.280	.289	.428
12	9	.152	.194	.042	.198	.298	.350	.492
13	11	.112	.149	.037	.219	.287	.331	.436
14	9	.121	.136	.015	.159	.266	.280	.402
15	8	.114	.131	.017	.145	.349	.259	.480
16	4	.138	.149	.011	.138	.328	.276	.477
17	11	.133	.134	.001	.194	.397	.327	.531
18	9	.136	.178	.042	.182	.297	.318	.475
19	10	.142	.127	-.015	.178	.362	.320	.489
20	10	.127	.136	.009	.144	.255	.271	.391
21	9	.142	.163	.021	.119	.285	.261	.448
22	8	.112	.131	.019	.136	.286	.248	.417
23	11	.097	.113	.016	.163	.300	.260	.413
24	13	.130	.146	.016	.122	.263	.252	.409
25	10	.122	.158	.036	.177	.297	.299	.455
26	10	.144	.156	.012	.179	.280	.323	.436
27	11	.155	.151	-.004	.118	.290	.273	.441
28	10	.118	.139	.021	.159	.276	.277	.415
29	10	.109	.104	-.005	.157	.290	.266	.394
A. M.		.1264	.1420	.0156	.1543	.2962	.2807	.4383
P. E.		$\pm .0021$	$\pm .0025$	$\pm .0021$	$\pm .0036$	$\pm .0040$	$\pm .0038$	$\pm .0045$

*These letters refer to the kymograph record.

¹ Starting time is defined as the interval elapsing between the firing of the gun and the removal of either the back or front foot from its mark.

From the States

This department includes correspondence from state high school coaches' associations and state high school athletic associations. All associations are invited to participate.

Illinois

Rules committee meeting

THE MEETING of the National Basketball Rules Committee will be held in Chicago during the week which ends on April 9. The place of the meeting was determined by mail vote of the 19 members of the committee. At this meeting various organizations will be given a chance to present their views relative to the rules for next season and the rules will be made up. The annual basketball questionnaire is now in the hands of members of the committee and will be circulated during the various tournaments in the early part of March. Some of the topics upon which sentiment is being collected are:

1. A check up on the sentiment concerning the rules which were adopted last year.
2. Observations relative to whether the game is too fast for the health of players and whether there is a proper balance between offense and defense.
3. Sentiment will be secured relative to the advisability of having all jumps in one of the restraining circles, whether local managers should be allowed to extend the end lines four feet behind the backboards in case space permits, whether college and independent games should be played in quarters, whether some provision should be made for providing a rest period following a field goal and whether a held ball should be declared whenever a player in possession or control is on his knees or is prostrate.

Molded basketball

The new type molded basketball has been widely used in Illinois during the past season. Its popularity indicates that its use will be almost universal next year. The ball has a better shape, a more accurate reaction and retains this shape and reaction for a considerably longer period than the sewed-type ball. The ball has been used in a number of invitational tournaments and will also be used in several of the state-sponsored tournaments that lead up to the state championship.

In order that schools may be able to make next year's purchases intelligently, the state board of control announced the type of ball which will be used in all tournaments in 1939—the National Federation Approved molded ball. This is in harmony with the action of four other states which adopted the molded ball for use during the current season.

Considerable experimental work has been in progress with a 29-inch basketball for high school use. There are

many who believe that when the new type molded ball is used the minimum size should be 29 inches rather than 29½ inches in circumference. A number of balls of the slightly smaller size have been made up for these experiments and school men are comparing the results.

New buildings

A considerable number of new gymnasiums or field houses have been completed during the season. Some of them follow: Abingdon, Arcola, Arthur, Ashmore, Atwood, Campbell Hill, Chenoa, Crossville, Elkhart, Franklin Grove, Golden, Kewanee, LaRose, Littleton, Little York, Mackinaw, Maywood (Proviso), Mendon, Mt. Carroll, Noble, Oneida, Orangeville, Peoria (Woodruff), Piper City, Rochester, Rock Island, Rosiclare, Seymour, Sorento, Taylorville, Serena.

One of the most pretentious of these buildings is that at Proviso. The building includes a full sized basketball court with a seating capacity of 3000, spacious locker and apparatus rooms, a dirt track on the lower floor and a swimming pool. The athletic director is Selmar Storby who came to Proviso from Quincy, Ill., where he coached one of the state championship basketball teams.

Kewanee also has an unusually fine new gymnasium. The coach is Ross Anderson who has been active in Illinois basketball circles for a number of years. Elgin has just approved a \$300,000 building program which has a provision for the construction of a large gymnasium.

H. V. PORTER,
Illinois H. S. Athletic Assn.,
Chicago, Ill.

Alabama

Object to Federation rules

AFTER several years of football under National Federation Rules,* the Alabama High School Coaches Assn. believes such rules to be unnecessary and desire the restoration of the collegiate code for high school contests in the state. Not that the coaches seriously object to Federation rules, but since they are fundamentally the same as the collegiate rules, the high school code therefore is unnecessary. The few differences in the two sets of rules are not of sufficient value to justify the troublesome confusion.

Favor spring training

The Association also desires the anti-spring training football rule to be repealed in favor of three or four weeks of spring training. Many of the smaller high schools oppose spring training be-

*Alabama is one of the 20 states which have adopted the football rules of the National Federation of State High School Athletic Assns.

cause rural and financial conditions almost prohibit it. They also object because it gives the larger schools an opportunity to have better teams and as a result run up larger scores against the smaller schools. (The writer believes, personally, that in the spirit of good sportsmanship the larger schools should refrain from piling up scores against the weaker small schools and crushing the moral of the opponents.)

Of course the fear of over-emphasis is one objection to spring training. A majority of the larger high school members believe there are several justified advantages of spring training. It affords an ideal opportunity to teach fundamentals which conditions do not permit to the necessary degree in September when the coach must devote a large part of his time to team organization in preparation for the opening game.

The better the boys are trained in the fundamentals, the fewer will be the injuries. With more time to observe and study the candidates, the coach may uncover talent that might have been overlooked in the September rush. It would mean better played football within our own state and would remove the disadvantages incurred in playing out-of-state teams in which spring training is permitted.

The contention of the Association is that the schools that can have and desire spring training should be allowed to have it. Again the precepts of good sportsmanship suggest that the smaller schools and other schools that cannot have or do not want spring training, should not stand in the way of those schools that can have and desire it.

This argument by no means exhausts the pros and cons of the issue.

RUFUS G. HIBBETT,
Alabama High School Coaches Assn.,
Florence, Ala.

Connecticut

Laceless ball approved

DETAILS of the New England basketball tournament were covered at the last meeting of the tournament committee, including the selection of a laceless basketball as the official ball and officials to handle the tournament. In view of the change in rules and the increased tax on the players, it was voted to permit the participating teams to bring 12 players instead of the customary 10.

The per diem allowance is continued at three dollars and transportation not to exceed rail fare to Providence. At the suggestion of the committee, the following action was taken by the council. In view of the report that there may not be a Western Massachusetts tournament this year through which a representative from that section could be determined, it was voted that in case the Massachusetts Athletic Association does not select two teams to represent that state, that the tournament committee have the authority to substitute a second Rhode Island team in its place.

Chairman Walter B. Spencer of the insurance committee, reported that the

Athletes Benefit Plan weathered its first test by paying all claims incurred during the football season of 1937, amounting to approximately \$465. The registrations up to Dec. 3 were 785 who paid a total of \$738.75. Expenses, clerical, etc., amounted to less than \$90. Money available for claims, at this time, is sufficient to meet all, to date, and leave sufficient funds for winter sports claims.

Michigan

Assignment of officials

NEARLY 150 officials on the approved and upper half of the supplementary lists will be used throughout the state in district, regional and final games. Assignments were made by a committee on the basis of recommendations of tournament managers, ratings of officials, availability, and their proximity to tournament centers.

The assignment of officials is rather a difficult task because usually in each section of the state, outstanding officials are recommended for more than one tournament center. General policy was followed of assigning at least one man to a center who was requested by the tournament manager, and then, if necessary, assigning another official or more whom the committee felt would be acceptable. Tournament managers have been sent recommendation blanks with the request that they recommend officials whom they knew would be acceptable to schools likely to be assigned to their tournament centers.

The 1938 state swimming meet will be held at the Michigan State College Pool, East Lansing, on March 19. Schools which have indicated on their classification information cards that they are sponsoring swimming as an interscholastic sport, have already been sent a meet announcement and entry blank.

The meet will again be conducted on a two class basis. Class A schools will compete in one group and schools with enrollments less than 700 will compete in Class B. School trophies and state association medals will be awarded in each class. There will be no individual entry fees.

Vermont

Triple membership

THE Vermont Coaches Assn. during the past year has succeeded in nearly tripling the membership. Paid-up members now receive courtesy cards which give them free admission to all regularly scheduled athletic contests in the state.

The Association took an active role in the re-classification of schools into A, B and C groups, and ended the unsatisfactory experiment with sectional basketball tournaments preceding final play-offs. A committee is now engaged in trying to find a suitable method to determine the annual baseball championship.

In the past few years the leadership of such men as Bill Hammond of Cathedral, Buck Hard of Burlington, Bob Lewis of Lyndon Institute, and Bill Wilbur of Spaulding, now president, has done much toward a better understanding between the headmasters and the Coaches Assn. Their leadership has likewise helped to unite the coaches themselves more firmly, and has definitely made for better coach-to-coach relationships on the athletic field.

O. W. "ORRIE" JAY,
Vermont Coaches Association,
Burlington, Vt.

Kansas

Eligibility cases

SEVERAL peculiar eligibility cases were reported to and ruled on by the board of control over the past year. During the football season, Tom Quinn of Manhattan and William Studer of Jamestown were declared ineligible for not complying with the provisions of



the transfer rule, and all games in which they participated were ordered forfeited.

Osawatomie High School discovered that one of its football players, Stanley Smith, was ineligible and reported it to Association headquarters. School officials had failed to check the boy's statement regarding his residence and permitted him to compete. There was no intentional violation but it was necessary to forfeit all games in which Smith had participated.

The superintendent, coach and representatives of the Board of Education and faculty of Holton appeared before the board to petition for a favorable ruling on the eligibility of Ivan Wishkeno, an Indian boy, who was transferred from Haskell Institute to Holton High School in the fall. The boy is a ward of the government and a favorable ruling was requested on the plea that the government assumes the relation of a parent.

After lengthy discussion and consideration of the case, the board ruled that the boy would not be eligible until after he attended Holton for 18 weeks. The boy's father lives near Mayetta. It was agreed, however, that the matter of approving the policy of the government in moving wards from one school to another should be placed before the delegate assembly.

The board reinstated the two Potwin High School boys who became ineligible for baseball because of having played in a semi-professional tournament in violation of Association rules.

In view of the pending referendum on the rule prohibiting girls' basketball tournaments, it was voted to defer the application of the rule in its entirety until the opening of school next fall. In the meantime girls' basketball teams may enter one tournament only which has been approved by the Board of Control, the tournament to include not more than 16 teams in which any team may not participate in more than one game per day.

Minnesota

Reserve section for coaches

FOR THE state basketball tournament at the Minneapolis Auditorium on March 24-26, a section of seats on the main floor or 1st balcony, side, will be reserved for basketball coaches who are members of the Coaches Association at \$1.50 for the five sessions. The coach may reserve a seat in this section for anyone who accompanies him by paying the regular season reserved seat price of \$4. These tickets, however, must be ordered at the same time the coach's ticket is ordered.

Following are the results of a recent questionnaire sent out to all high schools to determine what activities each will engage in during this school year: Track, 280; Tennis, 68; Football, 228; Basketball, 465; Swimming, 31; Baseball, 228; Golf, 70; Hockey, 24; and Six-Man Football, 29. Also included in the questionnaire were Debate, 86, and Declamation which proved second only to basketball in popularity, receiving 422 votes.

Sanction has been given to Carleton College to run the following interscholastic meets: May 7, 37th Track and Field Meet and 3rd Tennis Tournament, and on May 28, the 4th Baseball Tournament.

Ohio

First state wrestling meet

THE first state high school wrestling meet will be held in the John Hay High School gymnasium in Cleveland on March 18-19 under the direction of Floyd A. Rowe of the Cleveland Board of Education. A school may enter one boy, who must be eligible under the Athletic Association rules, in each of the ten classes. All entries must be in the mail no later than Monday, March

(Continued on page 34)



The half-back ("scrum worker") has just rolled the ball between the two forward lines of the scrum where it will be heeled out.

RUGGER—EVERYBODY ON THEIR OWN

By Clyde Williams

Rugby is flourishing in Southern California. The Southern California Rugby Union, with headquarters in Hollywood, has twenty actively competing teams under its jurisdiction, and the athletic clubs of the larger cities already are playing regular schedules. These weekly matches are rapidly educating the public to the merits of the game. Many of the players are high school football stars who learned the game in school where the sport is making rapid headway. In the San Bernardino High School the game has been firmly established under the guidance of Clyde Williams, assistant football coach.

RUGBY FOOTBALL, long a popular sport in English schools, is rapidly making a place for itself in the high schools of Southern California. Since the rugby season usually extends from January to May, the game is an excellent conditioner for varsity and sophomore football men during the off-season.

But rugby can stand on its own as a game and need never be justified because it is a conditioner for some other sport. Played without headgear, shoulder pads, thundering interference or substitutes, rugger compares with other outdoor sports as a developer of stamina, courage and initiative.

Once the game is under way, the boys are thrown entirely on their own. There are no watchful coaches on the sidelines to direct the general strategy of the team, to remove a player from the game for an error, or to send in a specialist to kick or pass. In short, rugby is one of the few games in which victory depends entirely upon the resourcefulness of the players.

Yet it is a relatively simple game to learn as it parallels our football closely. A point in its favor as a school sport is the fact that with the exception of the regulation rugby

football, no other equipment is required that already isn't provided by the average high school physical education department.

The game is played on a turfed field similar to the football gridiron except that it is usually 110 yards long and 75 yards wide. The field is divided crosswise, as in our football. Measured from the center line, there are the 10-yard line, the 25-yard line and the goal line. The sidelines are called touch lines.

Corresponding to our end zone, there is an in-goal area behind the goal line in which the ball is touched down to score a try. This area, from

the goal line to the dead-ball line (end-line), is not supposed to exceed 25 yards. The goal posts are on the goal line; the poles are 18 ft. 6 in. apart and the crossbars must exceed 11 ft. To score the ball must be carried across the goal line or kicked over the crossbar as in football. A goal is scored by kicking the ball over the opponents' crossbar from the field by any place-kick or drop-kick except a kick-off, without touching the ground or any player of either team.

The rugby ball resembles the early American football before it was streamlined. It is 11 to 11½ in. in length, measures 30 to 31 in. in end-on circumference, and 24 to 25½ in. in width circumference. It weighs between 13½ and 15 ounces.

Equipment

For equipment, regulation gym suits without any padding are the standard rugby garb. Thus, jerseys, gym pants and football shoes are conventional rugby costume with different colored jerseys to designate the opposing teams. When the Cambridge University 15 toured the United States in 1934, they wore uniforms very similar to soccer attire—full-sleeved jerseys with collar attached, trunks that extended almost to the knees and heavy woolen stockings to protect the shins. Players are forbidden to wear any dangerous projections such as buckles or rings; and any studs on the shoes must be circular and made of leather to prevent injury.

Scoring is somewhat more complex than in American football. A try, which corresponds to a touchdown, counts three points and is scored when a player grounds the ball in his opponents' in-goal. A goal from a try, corresponding to the point after touchdown, counts two points. The conversion is attempted by a place kick

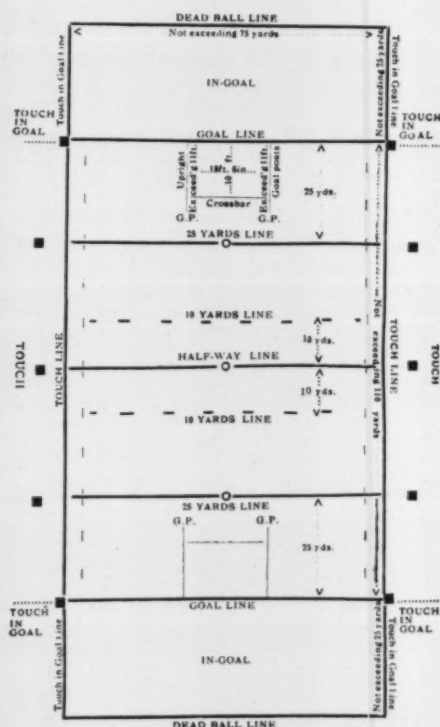


Diagram of rugby field.

from a point on the field-of-play parallel to the spot where the ball was touched down for the try. A goal from a free kick or penalty kick counts three points, and a drop-kick from any point on the field counts four points.

On a try, merely crossing the goal line is not enough—the ball must be touched to the ground. In football, if a ball-carrier crosses the goal line and is then shoved back, the touchdown is allowed. But in rugby the attempt counts for nothing unless the carrier grounds the ball.

Officiating

In international matches the game is divided into two periods of 40 minutes each with five minutes rest between halves. In other matches the respective teams can set a time limit. If the two teams cannot agree the referee is permitted to fix the time. Only the referee has the privilege of calling time out if there is a legitimate reason for delay, but this time out is not allowed to exceed three minutes. Before the game starts, the captains toss for the right to kick off or the choice of ends. In the second half the teams change goals.

The referee blows his whistle to indicate a fair catch, when a player has been hurt or to halt the game when continuation of play would be dangerous. Any player forced to withdraw because of injury is not permitted to re-enter without the sanction of the referee. However, few serious injuries occur in rugby, and if the play becomes unnecessarily rough, the referee can penalize.

Two touch judges assist the referee. Each must carry a flag and remain on the touch lines, one on each side of the field, except when a kick at goal from a try, free kick or penalty kick is being taken. Then both judges must assist the referee by standing near the goal posts so that they can raise the flag to signal a successful conversion. Any decision of a touch judge may be overruled by the referee.

Player limit

Not more than 15 players are allowed on a side. The match is started by a kick-off, after which any player who is on-side—i.e., in the game—may at any time kick, pick up or run with the ball, or tackle a player carrying the ball, with certain restrictions. The ball may be passed from one player to another, provided it is not passed, knocked or thrown forward. There can be no forward passing or interference with the runner.

If the runner finds himself cornered, he can "hand-off" (stiff arm) the tacklers, or try to dodge through them, but his safest bet is to lateral or backward pass. Any man running with the ball may pass, even after he is tackled and falling, to any man on his side who is even with or behind the passer. This feature of rugby play takes the place of interference.

Should the tackler succeed in downing the ball-carrier before the latter

can successfully pass or kick the ball, the ball-carrier must drop the ball, for it is a foul to be downed with the ball in possession.

If the ball is thrown or knocked forward, it is brought back to the spot of infringement and a scrummage is called, a scrummage being equivalent to the formation of the line in our football. Here the referee awards to the team not responsible for the stoppage of play, the right to put the ball in scrummage.

The formation of the scrum, or line, is subject to certain rules. It consists of three front rankers, three in the second rank, and two in the third rank, while the backfield consists of the scrum half, the stand-off half, two three-quarter half-backs, two wing half-backs, and one full-back. The player putting the ball in scrummage stands about three feet away from the formation and with both hands below the knee gently propels the ball along a line midway between and parallel to the lines of feet of the opposing front row forwards. The middle man in the front row, the hooker, attempts to hook the ball with his heel and roll

essentially those of our own game. A running attack is stopped by tackling, but the rugger tackle should be high enough to pinion the runner's arms or hard enough to spoil the accuracy of his lateral pass. The other defensive play in rugby is the kick for touch (out of bounds).

Method of presentation

Rugby is usually first tried out in the gym classes. After the fundamentals have been reviewed and the boys have learned the game, different gym classes are pitted against each other. Then class teams are organized and intramural matches played after school. One football coach recently remarked, "I can learn more about a boy's football qualifications by watching him for an hour on the rugby field than in any other way. In fact, some of my last year's squad would never have made the team, if I had not first observed them in rugby."

Rugby has definite advantages to offer an aspiring football candidate. It teaches him ball-handling, how to lateral pass, tackling, punting, drop- and



TYPICAL RUGBY ACTION SHOT: Pinned by a tackle around the knee, the ball-carrier is about to lateral pass to a teammate. Had the tackle been higher, the chance to pass would have been slim.

it back to his second and third row forwards.

"Hands-in-the-scrum" is called when a player touches the ball with his hands while it is still in the scrum. This infringement draws a penalty kick. If a forward lifts his feet to hook before the ball is past the feet of the outside front row forwards ("feet-up"), it is an infraction and also draws a penalty kick.

Line-out

When the ball goes over the side-lines it goes into touch and a line-out is called at the point where the ball went into touch. The wing three-quarter passes the ball in directly over the lined-out forwards who try to jump into the air and catch the ball to pass it out to their waiting backs.

The defensive tactics of rugger are

place-kicking, etc. A study of rugby offense will show that the game develops initiative rather than discipline as our football, and unselfishness even more than initiative. The rugger attack does not encourage one player to get the ball and make a spectacular run for the goal. Rather he must lateral pass to another player as quickly as possible.

Therein lies the basis of the wide open play of rugger: The runner may be stopped but the ball keeps on moving. Thus, the strategists of the game have developed string-out formations of anywhere from two to five players forming out to the side of the ball-carrier in a long, staggered line, each player a few strides behind the other.

The undersized boy is not at a disadvantage in this game, because speed and endurance count for so much more than height and weight.



ORGANIZATION FOR SIX-MAN FOOTBALL

By Stephen Epler

Stephen Epler compiled the first set of rules for six-man football in 1934 when he was coaching at Beatrice, Neb., High School. Since then the game has flourished and is still growing. In response to a number of queries from coaches for suggestions on how to get six-man football started in their school and district, Epler gives the following suggestions that stress the need for planning and preparing in the spring.

IS YOUR school one of the ten thousand high schools in the country that do not play football? Or is your school among the forty per cent of the high schools that maintain varsity football teams, and gives from five to twenty per cent of the boys in the school a chance to play the game? In either case why not give the other eighty or ninety-five per cent of the boys an opportunity to play intramural football against equal competition?

Several hundred schools added six-man football to their athletic program in the fall of 1937 and probably even more will follow suit in 1938. If your school is to be among the new recruits, now is the time to make plans. Do not wait until next September to tackle the enormous task of purchasing equipment, laying out fields, and filling out a schedule.

The first thing to do is to acquaint yourself with the game. Those who know eleven-man football will find this a simple task. The six-man football playing manual and rule book, of course, will be of help. The coach should also have a copy of the eleven-man football rules and at least one good book on how to coach football. When you have a good idea of the game, the time is ripe to convert the local school authorities, the rest

of the coaches in your conference, and to seek the support of the state high school athletic organization.

Six-man football will have easier sledding in your state if the aid of the state organization is secured. The state office will do its part to help organize six-man football if it knows that a large number of schools desire this service. Nearly forty states had at least a few of their schools playing six-man football in 1937, so the chances are that you can find coaches and superintendents who have used the game, to help you secure the backing of the state organization.

Conference organization

A number of state organizations—North Dakota and Montana, for example—have already developed six-man football to a high degree, North Dakota had over one hundred high schools playing interscholastic six-man football last fall, while only eighty-five played eleven-man football. Those who fear that the six-man game will cause the regular game to decline will be interested in knowing that the eleven-man game has increased along with six-man football in North Dakota. Seventy-five high schools played the regulation game in 1935, eighty in 1936, and eighty-five in 1937.

A number of other state high school organizations have indicated that they are going to sponsor six-man football on a state-wide basis in 1938. The chances are that the state office will be pleased to know of your interest and will be able to help you organize six-man football in your district.

To play interscholastic six-man football, obviously you must have competition. Some of the pioneer teams such as Chester, Neb., and Davidson, Okla., obtained opponents by inducing schools with eleven-man teams to add a six-man game to their regular schedule. It is much more satisfactory to form a conference of four to eight schools that are similar in size and conveniently located.

Even if you can find only two or three of the schools with whom you have athletic relations to join, a start can be made in organizing for next fall. Have a spring meeting of your new conference to organize and schedule games. If there are only a few member schools, schedule two games with each team on a home and home basis. At this meeting the officials may be selected and a series of meetings planned for them before the start of the season, to expound and study the six-man rules and how they vary from the rules of the regulation game.

All equipment orders may be pooled into one large order at this time, to get lower bids. It is well to point out that medium and low-priced equipment for the players does very well in six-man football. Some of the first six-man teams (i.e., Palisade, Neb.) used only headgears and shoulder pads as protective equipment and came through the season with no injuries. However, to make the game even safer, complete protective equipment should be provided for each boy. This first meeting can be used to talk over such

(Concluded on page 26)



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• QUESTIONS •

1. Why should a pitcher vary the time between each pitched ball?
 2. What is a waste ball and why is it pitched?
 3. What is probably the most difficult fielding play a pitcher has to make?
 4. Explain the actions of a catcher in his attempt to catch a foul fly ball.
 5. When should a catcher back-up or cover third base for an expected throw to that base from a teammate?
- 
6. What types of steals should a catcher always be looking for under the following situations?
 - a. Runner on first base.
 - b. Runner on second base.
 - c. Runners on first and second bases.
 - d. Runners on first and third bases.
 7. How should an infielder touch a base-runner with the ball as he slides into a base, providing the throw is perfect?
 8. What two rules should always govern a relay throw which is received by an infielder from an outfielder?
 9. Runner on first base, score 2-2, ninth inning, one out, batsman hits a ground ball to the first baseman why should the first put-out be made at second base? When should the first put-out be made at first base before making an attempt to get the runner at second base?
 10. Runners on first and second bases, none out, two strikes on the batsman, a ground ball is hit to the first baseman; explain every action the first baseman must make from the time he makes his throw to second base until the ball is returned to the pitcher in the middle of the diamond.
 11. When does the second baseman always cover second base for an attempted steal of that base by a runner from first base?
 12. When does the shortstop always cover second base for an attempted steal of that base by a runner from first base?
 13. Runners on first and second bases, the batsman hits a fly ball which is caught in right field; draw or state the final positions of each defensive player as the ball is thrown toward third base.
 14. Runner on first base, batsman singles to right field; draw or state the final position of each defensive player as the throw is made toward third base.
 15. Runners on first and second bases, none out, the batsman bunts a high infield fly which the third baseman drops. The runners advance and the batsman beats the third baseman's throw to first base. The umpire declared the batsman out. State in your own words that part of the infield fly rule which governed the umpire's decision.
 16. When should a third baseman play his position so that he is in front of the base line before the ball is delivered to the batsman? When should he be behind the line?
 17. What is probably the hardest fielding play a shortstop has to make?
 18. Runners on first and second bases, none out, the batsman hits a high fly ball just back of the infield, the second baseman goes back for the catch and the right fielder comes in for it. It is a question whether it will be an infield fly or an outfield fly. The right fielder shouts for the catch but drops the ball as the second baseman falls to the ground in order to keep from interfering with the right fielder. What would you do offensively? What would you have done defensively?
 19. Runners on first and second bases, the catcher by a quick throw catches the runner off second base. When the dust clears away both of the base runners are on the bag at second base. The infielder who has the ball touches the runner who was originally on the bag and he was declared out by the umpire. State in your own words the rule covering the decision.
 20. True or False.
 - a. It is the duty of an infielder to keep a runner as close to the base as possible.
 - b. A pitcher should not pitch to a batsman when an infielder is away from his correct position on the diamond.
 - c. Control is the greatest of all pitching assets.
 - d. A catcher should always back-up throws to first base.
 - e. A catcher should field all bunts with one hand.
 - f. An infielder should always throw a fumbled ball to first base for the attempted put-out.
 - g. Infielders should always watch runners touch the bags.
 - h. A second baseman should always toss with a sweeping underhand motion all balls hit to him near second base for a put-out at that base.
 - i. All outfielders should stop ground balls hit toward them with one knee on the ground and then assume a throwing position as quickly as possible.
 - j. A runner coming around third base in an attempt to score should always look at the defensive player fielding the ball and then use his own judgment as to the correct procedure to employ.
 - k. Three balls and one strike on a batsman always prompts the hit-and-run play.
 - l. A batsman should never turn his head as he swings at a pitched ball.
 - m. A base runner should never study the movements of a pitcher in order to find out the similarity of his knee and body motions in throwing to first base and in pitching to his catcher.
 21. How would you play your infield under the following situations, deep, halfway or in close? Your team is on the defense.
 - a. Runners on first and third bases, second inning, no score, one out, eighth man in the batting order at bat.
 - b. Runners on second and third bases, third inning, one out, your team leading by one run.
 - c. Runner on third base, none out, seventh inning, your team leading by one run.
 - d. Runners on first and third bases, eighth inning, none or one out, your team leading by two runs.
 - e. Runners on first and third bases, ninth inning, none out, your team (the home team) leading by one run.
 - f. Runner on third base, seventh inning, one out, your team one run behind.
 - g. Runners on second and third bases, ninth inning, one out, your team two runs ahead.
 - h. Bases full, ninth inning, one out, good batsman at bat, your team leading by two runs.
 22. What are the four most important qualifications of a good batsman?
 23. Why is it so difficult to teach a young man the art of bunting?
 24. What advice would you give your batsman under the following ball and strike situations:
 - a. Bases empty, two balls and no strikes.
 - b. Runner on first, one out, no score, two balls and no strikes.
 - c. Runners on first and second
- 

bases, one out, three balls and one strike.

- d. Runners on first and second bases, two out, two balls and no strikes.
 - e. Runners on second and third bases, one out, three balls and one strike.
 - f. Runner on first base, one out, three runs behind, three balls and one strike.
 - g. Runner on first base, one out, one run behind, three balls and one strike.
25. Runners on first and second bases, the catcher throws to first base in an attempt to get that base-runner, the runner on second base failed to steal third. What would you say, Mr. Coach?
 26. What should be the first rule for base running?
 27. Which opponents should you study very closely in order to become more proficient in your base running?
 28. What is the rule according to which a base runner should make an earnest effort to reach third base?
 29. Your team has runners on first and third, the batsman hits a ground ball to an infielder. What do you expect your base-runners to do?
 30. Your team has runners on second and third, one out, your batsman hits a fly ball to center field. What advice have you previously given your squad in regard to this particular base running problem?
 31. A coach made up his batting order as follows. If you do not agree with his selections make your own corrections.
 1. Left hand batter, fast, fine hitter, good bunter.
 2. Bad bunter, good hit and run hitter.
 3. Long hitter, big man, slow runner.
 4. Best batsman on the squad.
 5. Pitcher, fair hitter.
 6. Second best hitter on the squad, very fast.
 7. Good waiter, sharp but not long hitter, fastest runner.
 8. Player short in stature, left hand batsman, good bunter fair hitter, fast for a little fellow.
 9. Catcher, fair hitter.

• ANSWERS •

1. Timing of each pitched ball to the batsman, especially with men on bases, is very important. A pitcher should never form the habit of consuming the same length of time between deliveries. From the moment he takes his pitching position on the rubber until he makes his delivery there should be a variation of time. If the pitcher does not do this, the base-runner or runners will be invited to steal bases. (As a coach I would advise all pitchers to accustom themselves to a variation in time, accomplished by counting between pitches. After proper stance has

been taken count two and pitch, count four or five and pitch, count three and pitch, etc. Be sure to mix up the time between each delivery.)

2. An intended waste ball should be a quick pitch and so far away from the plate that it cannot be hit by the batsman. When a waste ball is signed for by the catcher, every player on defense should be able to leave his position without fear of the ball being hit by the batsman. The waste ball must not be hit.

The waste ball is pitched because the catcher has some defensive play in mind. The infielder ending the play should be in a position to do his part without leaving his position and giving the batsman an opportunity to hit the ball through the space left vacant. An outfielder can leave his position in order to back up a prospective defensive play knowing full well that the ball will not be hit.

3. One of the most difficult fielding plays a pitcher has to make is what is known as the swinging bunt. The ball is swung at very hard by the batsman and it is hit in such a manner that it rolls slowly close to the base line. The difficulty for the pitcher is to decide whether to let the ball roll with the hope that it may go into foul territory or pick it up for an almost impossible play at first base. The catcher should help the pitcher just as much as possible on this play.
4. Catching foul flies demands speedy movements on the part of the catcher. The mask should be firmly but quickly grasped by the bare hand and thrown from the face so that nothing will obscure the view from the ball. It should be thrown to one side so that there will be no chance of it being stepped on by the catcher as he goes for the fly ball. If the pitch to a right-handed batsman comes to the inside corner of the plate, and the sound of the ball against the bat denotes a foul fly, the catcher should whirl to the left and as the body is turning, the mask should be thrown off. On a ball to the outside of the plate, the catcher should turn to the right, throw off the mask and look up for the ball. The same procedure would be followed for a left-handed batsman. Inside pitches would be over the right shoulder, outside pitches over the left shoulder.

5. A catcher should never back up third base. There are times however, when he may be in a direct line of a throw coming from the left fielder to third base. In such case he would back up this throw without leaving his position. It is rather imperative that the catcher does not vacate the plate on throws coming from the outfielders to the infielders.

The catcher does cover third base on this play: runner on first base, the batsman bunts a ball for a sacrifice, the bunt being handled by the third baseman. The catcher would naturally go out for the bunt the moment the bat dropped indicating such a hit. As the third baseman fields the ball, the catcher shouts instructions and continues on to cover third base. The catcher covers third base at times on run-up plays when the plate is protected by a teammate.

6. a. Plain steal or delayed.
b. Plain. Batsman attempting to bunt and the runner stealing third. An attempt to steal as the catcher throws to second to catch the runner.
c. The answers as given for questions "B" also a throw to first attempting to catch that base-runner.
d. Delayed steal. Double steal where both base-runners start at the same time. Plain or double where the runner on first base goes almost to second base and stops.
7. An infielder should keep his feet on the ground as firmly as possible with the bag between them. The side of the bag into which the runner is sliding should not be blocked by the baseman's feet. This side of the bag should be the part on which the ball, firmly held in the glove, should be placed so that the runner in making his slide is bound to come in contact with the glove and ball.
8. The first throw is the long throw, the second throw is the short accurate one.
9. The putout should be made at second base in order to keep the winning run from reaching a scoring-position base.

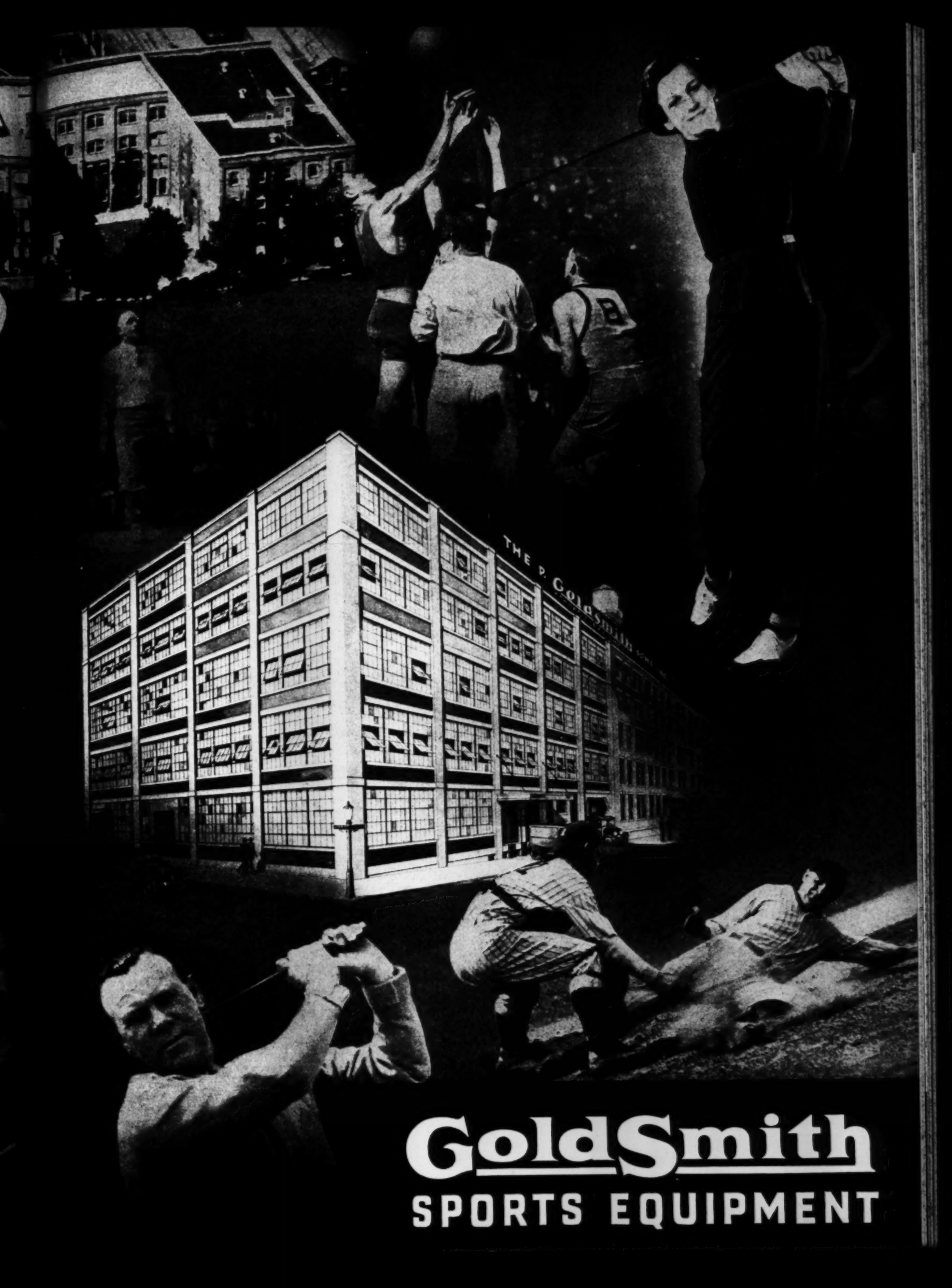
The only time the putout should be made at first base before making a throw to second is in a situation where the ground ball is hit directly over the bag at first base. The first baseman in his fielding actions has an opportunity to step immediately on the bag without giving the base-runner much of a chance to reach second base.

10. After fielding the ball the first baseman should be sure that his throw to second is perfect for the first putout. As soon as the ball has left the hand, the first baseman should immediately start for first base for the attempted completion of the double play, first-to-second-to-first. Many times the first baseman will make the first part of the play and find himself at an unaccustomed angle to the position of the first-base bag, that is, a position on the field from which he must see the bag before running to it. It is a good idea for the first baseman, as soon as he has thrown the ball for the first putout, to glance at the bag and then return his eyes to the throw com-

(Continued on page 28)

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PHYSICAL EDUCATION AT HAVRE HIGH

By Roy Wood

Emphasis of Havre's physical education program is on both formal and informal activities, stressing the fundamentals

Physical educators in Montana are waging a determined campaign for the establishment of a state department of physical education. Success almost crowned their efforts last year when a bill was defeated by a narrow margin. A staunch supporter of the bill, Roy Wood, director of physical education in the Havre Public Schools, describes the program which he successfully installed at Havre last year.

A MODERN program of health and physical education is essentially a force for education. It provides an excellent laboratory to assist the individual in a more complete adjustment to his environment, and to promote organic vigor and health through motor activities. With these objectives in mind, a program of physical education was started last year at Havre and the results have been uniformly excellent.

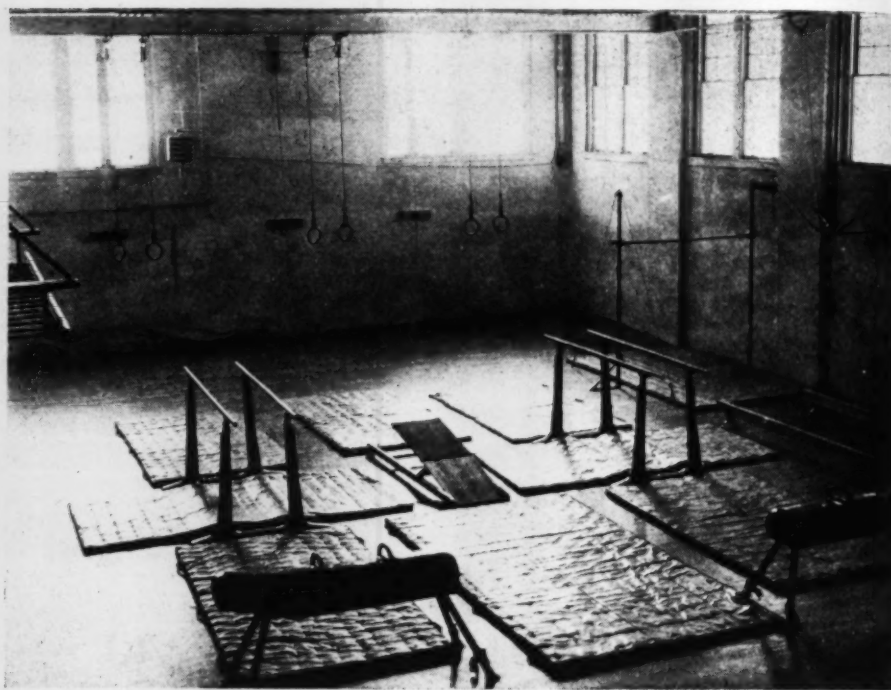
We have in our high school 285 girls and 291 boys. For their physical education work, there is available one large gymnasium and a smaller apparatus room. The latter was remodeled last summer from an unused area of the gym. Starting last year with a minimum amount of equipment, we feel that with the purchase of additional equipment last spring we have more equipment per student than any other school in the state.

In the apparatus room, used only for that purpose, we have 2 horses, 2 parallel bars, 2 horizontal bars, 1 spring board, 1 climbing rope, 1 climbing steel ladder, 1 horizontal ladder, 3 sets of flying rings, 3 sections of stall bars, and 10 mats of fractional sizes. This heavy apparatus is enhanced by a boxing ring that may be taken down and put up in a very short time, 10 pairs of boxing gloves, 6 foils and masks for fencing, 2 ping pong tables and sets, and hand apparatus of 50 sets of dumbbells, 100 Indian clubs and 50 wands.

Boys and girls segregated

Boys and girls are segregated into two separate departments of physical education and two instructors are employed on a full-time basis. The instructors handle all physical education and act as supervisors in the grade school. The high school classes are so organized that the supervisors are able to get away on Fridays to visit and teach in the grades.

The girls' instructor in the high school supervises the dancing classes in the grades while the boys' instructor draws up the lesson plans for all the grades and presents them to the teachers. All of the grade school teachers meet twice a month to study the next two weeks' lesson plans. These meetings are held to enable the teachers to better understand the material to be presented and to help each other with individual problems. Quite often one of the grades will present some type of ex-



This fully equipped apparatus room was remodeled from an unused area of the gymnasium.

ercise or stunt that can be adapted by the others.

The high school classes are 60 minutes long. Each pupil receives two periods per week in the gymnasium and one period per week in personal hygiene. When they enroll, the pupils register for physical education just as they would for any other subject. We try to keep the classes as nearly equal in numbers as possible, or from 35 to 40 pupils in each class. The classes are organized on the basis of grade in school; freshmen will be grouped together, sophomores together, etc. It has been found that the only way to really have a progressive program is to group the students in this manner.

Classified by formula

After the students have been grouped according to class, they are then classified within the class period by a combination of age, height, weight, using the formula $2A + .475H + .16W$. After ascertaining the age, height, and weight combinations the students are placed in squads according to the results of the formula. Thus we have freshmen boys of the same physical development in a squad. They do not have to compete with older or heavier boys. In other words, it is merely a manner of equalizing the work of all the boys in the fairest and safest possible way. After the squads have been assigned, each squad chooses its own leader with the permission of the instructor.

It is possible for each boy or girl to earn one full credit for physical education. Students receive grades for their work as in academic subjects. (A, B,

C, D, F.) These marks are based on attendance, deportment, effort, achievement, posture, hygiene, ability. We try to base our grades particularly on the achievement of each individual, not in comparison with the other boys of the class, but in comparison with his early work.

In our program we try to emphasize both formal and natural activities as well as a thorough stressing of the fundamentals. Primary instruction is given to the leaders of the squads in a separate period. The material to be presented to the class is gone over with the leaders and all questions ironed out.

The classes are then given instruction by their squad leaders under the supervision of the instructor. Approximately 40 percent of the period is used for instruction, depending upon the activity, and 50 percent is used for free and supervised play. The remaining 10 percent of the period is for dressing. The various groups in the classes are assigned a given type of activity for the instructional period. When games are played that require a referee, the boys and girls of the classes take turns in this capacity.

The attendance is checked by the students calling assigned numbers and the instructor checking the number of absentees. Attendance records are kept in a roll book.

We have a basket room in which all of the gym clothes are kept. Lockers are provided for street clothes when the student is in class. Gym clothes are checked out at the beginning of the period and checked back in at the end. A

(Concluded on page 31)

WHERE IS NO. 10 ? ?



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Aquatic Forum Notes

DURING the Christmas recess every winter, the annual aquatic forum at Fort Lauderdale, Fla., gives school and swimming men all over the country an opportunity to meet and exchange views on swimming methods. To the coach who is seldom able to get away or who is located in a school far removed from any large swimming center, the forum is particularly inviting since most of the outstanding coaches and swimmers are usually on hand to lecture and demonstrate.

At the forum this year, the program committee assembled an impressive group of guest speakers for a series of informative lectures both on the technical and general aspects of the water sport. Very often the speaker would bring one of his star swimmers up to the rostrum and use him to demonstrate the finer points of his lecture. Excerpts from several of the talks follow.

Armbruster—flutter kick

Dave Armbruster, coach of the University of Iowa, aroused a great deal of discussion in his analysis of the flutter kick of the crawl stroke. The refraction of light, stated Armbruster, gives the false impression that the flutter kick is small. When seen from observation windows in sides of pool beneath the surface, the kick is actually $2\frac{1}{2}$ to 3 feet in size. The proper kick is downward below the center line of progression in order to throw off water on the upward drive. A paddle effect results from below the ankle. The sole of the foot is more effective than the instep.

Tests proved that the resistance from the feet is behind as in a moving paddle, auto, etc. The eddying action behind the feet gives it the traction. When the sole of the foot kicks up, you have a flat surface which gives more action than the down beat. Tests also proved that the swirls go directly downward towards the bottom. Avoid hooking the big toe on the down swing. The Japanese have a big knee bend on the up swing. The whip should occur at the end of the down and up beat. In the back stroke emphasize catching the water on the under side of leg and stretch into the movement; don't snag it.

Gordon—starts and turns

For his lecture on starts and turns, Al Gordon brought the coaches down to the Fort Lauderdale Pool where Gordon coaches in addition to his work at Fort Lauderdale High School.

My job as I have conceived it here in coaching the high school boys the starts, turns, etc., is to prepare them for the work of this kind when they go to the colleges. My conception of a start is to get a little advantage of the other fellow if you can, but a fair ad-

Interscholastic Swimming Coaches Association of America

vantage. I do not teach them to jump the gun. I condemn them for anything of that kind, but if I can teach them a start that will take them out a little ahead, it gives them that advantage. In the beginning I conceived a start to be a great deal like a broad jump, so if some do not know how to jump we take them on the sand and teach them the broad jump. In other words, it is the same movement you use in the broad jump except instead of landing feet first, you land head first.

The average boy when you teach him a start will start diving in head first. I try to get that out of his mind, and to look far down the pool, farther than where he will land. I try to get him to rise somewhat in the air, not

go off the pool and hit the water too soon. A broad jump getting out and with his head up—and as he begins to feel himself dropping to the water, a sudden drop of the head and hands slightly will take him into the pool in a smooth manner, toes held straight. As to when he shall start his leg movement, that is a matter of opinion—some start as they are going through the air. I prefer to start the leg movement a little after he gets the glide. Cutting down resistance when going through the water makes speed.

Question: What about the angle the body should be in? **Answer:** The flatter he can hit, the better—no arch. It retards the progress and creates resistance—hit just as flat with arms slightly dropped. In a back stroke start, I like an arched back almost as in a back dive, lifting the body out of the water if possible, and turning the head and arms back, as narrow as possible, glide then pull a powerful sweep with both hands down. Then start the back stroke.

Turns

With the beginner I try to show the difference between turning a log in the water, and spinning a ball. The theory of the turn is actually to make yourself as much into a ball when the turn is made, as is possible. With a quick snap-up of the legs and a drop of the head, make yourself as round as possible. I like to have the turn start as they come into the wall. To practice this turn away from the wall, take a jellyfish float position and pull with one arm; that turns the body.

A very important part, of course, is to make the turn as close to the wall as possible. If away from the wall, you do not get the push as you do close to the wall. After the turn is made, a short glide and the legs should immediately start. The ordinary back stroke turn is simply made by rolling over when the hand touches, throwing a hand across the body, a quick snap of the legs, so they are in the same position as in the original start. Make a turn where you actually stay on your back. The spin turn is the better.

Spin turn—the difference is the legs are thrown up. Roll into a ball on your back, same as in the crawl turn and spin the same way.

Somersault turn—a somersault turn is usually used in turning from one stroke to another, breast stroke to back stroke, etc.

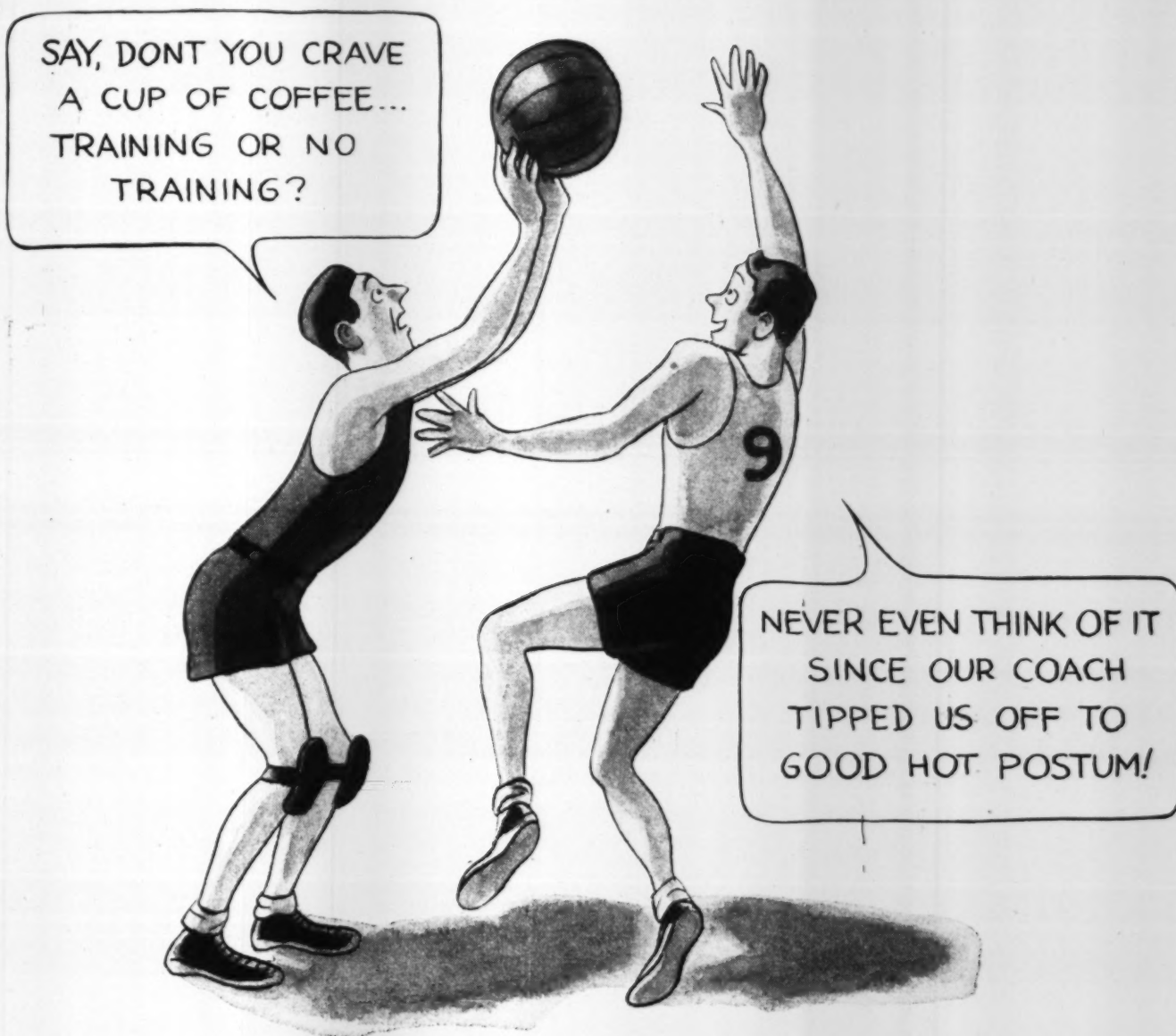
Peppe—factors in diving

Mike Peppe of Ohio State University discussed the factors that make a successful diver. He gave as a definition of diving, that it is the art of expressing neuro-muscular skills from the springboard into the water according to definite standards.

(Concluded on page 30)



For a back stroke start, arch the back almost as in a back dive, lifting the body out of the water and throwing back the head and arms. Glide, then pull powerfully with both hands.



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Basketball Coach at the
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Six-Man Football

(Continued from page 16)

things as guarantees to the visiting teams (don't make them more than you can afford), officials' fees, and for the election of officers for your conference.

Securing local support

Chronologically, the first step is to get the approval of the local school authorities. The coach and superintendent should first determine if the boys want football. Since the game is primarily designed for the boys, it should not be forced upon them against their wishes. Only if the boys themselves are enthusiastic should the program be launched. It is, however, an extremely atypical community where the boys are not eager and anxious to play football.

Before going to the school authorities to have them pass on the matter, you should be prepared to tell them the values of football, the cost of buying equipment and other needed items, and have some plans in mind for raising part of the budget. If you are able to justify six-man football on a sound educational basis, do not hesitate to seek support from the regular school funds.

Spring practice

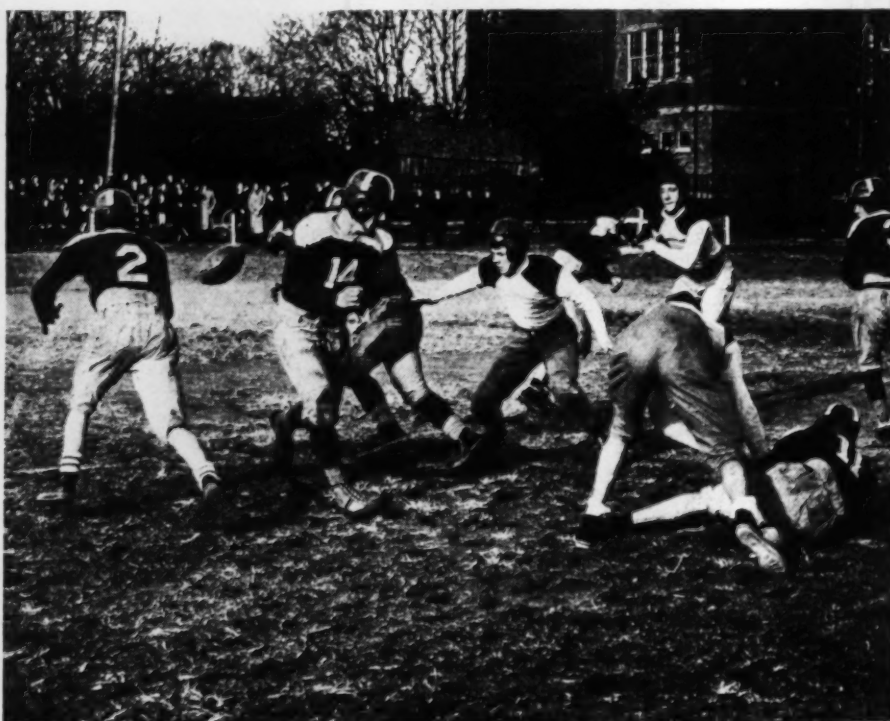
If you plan to play six-man football for the first time next fall, it will be wise to have a week or two of

spring practice (unless this is forbidden by the state high school athletic association). This means that the equipment must be on hand early and the field laid out. In spring practice give the boys fundamentals on which they can drill individually and in pairs during the summer vacation, such as blocking, tackling, throwing and receiving forward and lateral passes, passing the ball from center, drop kicking, punting and drills to keep the wind and muscles in shape. By having spring practice and organizing the six-man football program in the spring, you will be ready for smooth sailing in the fall. Let this be your axiom: "Don't put off until fall what you can do in the spring."

A number of the larger high schools with eleven-man varsity teams are finding six-man football well adapted to the intramural program. From an educational standpoint, if football is good for the chosen few, it is good for all boys with sound physiques. Six-man teams make it possible to divide the boys into more homogeneous groups so they can play against equal competition. The intramural program is and should be for the benefit of the boys themselves, but at the same time it is the best source of material for the varsity team.

Fake Buck and Lateral

Action in a six-man football game between the Manhasset and Roslyn high schools of Long Island, N. Y. No massed or punishing play here when the rules permit all players except the snapper-back to receive forward passes, and require at least one backward pass after the snap from center.



IN THE MAILBAG

TO THE EDITOR:

Call it a marathon or a test of endurance, but don't call it basketball. Every change in basketball over the past few years has been intended to satisfy Mr. and Mrs. Loyal Supporter who thought the game was too slow. First, the five-man defense was objected to; then delayed offenses, which Dr. Rule Maker cured with the 10-second rule; then the pivot play, for which "evil" the rules makers drafted the 3-second rule. But still the game was too slow, so the ball was put in play immediately after a successful free throw. Mr. and Mrs. Fan liked this very much and said let us have more of it; so out went the center jump and in came the test of endurance.

So you readily see that all of the doctoring of the rules has been to satisfy the spectators. They forgot to take into consideration the most important thing—the boy. They forgot that the game is supposed to be a form of play and exercise in which thousands of boys participate each year.

In the many close tournament and regularly-scheduled games I have witnessed this year, in general only the older boys were able to stand the blistering pace of an entire game. The elimination of the tip-off not only made the game too strenuous by its speed, but it also made it more strenuous by making scores more even.

One more move in the direction of faster basketball, and it will be necessary for referees to bring along substitutes to take their place in case of an overtime period.

I, like many others, thought the game was all right before it had been tampered with. Since we are not in the habit in this country to admit we are wrong and return to the old way, I propose the following changes in a humble effort to make America's most popular high school game safe for the boys.

1. No high school boy should be allowed to participate in more than one basketball game a day. If this practice can't be stopped, then do away with tournaments.

2. Allow three minutes between quarters.

3. Remove the backboards. I believe this would actually help to counteract the advantage that the tall player has over the short player, especially under the backboards where height counts to such an advantage. More time would be spent also on accurate shooting. (For pros and cons on backboard-less basketball, see "Here Below" on page 5 of the February Scholastic Coach.

4. After a successful free throw or field goal, the referee should handle the ball for a period of ten seconds before the ball is given to the team scored upon. Time would be out during the ten seconds.

VANCE E. GEIGER,
Coach, Hopkins High School,
Hopkins, Mo.

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Baseball Quiz Answers

(Continued from page 19)

ing from second base. As soon as he catches the ball coming from second base, he should rush toward the middle of the diamond, thus protecting a possible attempt on the part of the runner who was on second base to score.

11. Anytime a waste ball is signed for by the catcher and delivered by the pitcher, the second baseman should cover the bag in case a left-handed batsman is at bat.

Anytime a dead left-field hitter is at bat, the second baseman should cover the bag on all attempted steals of that base.

12. Anytime a waste ball is signed for and delivered by the pitcher, the shortstop should cover the bag in case a right-handed batsman is at bat.

Anytime a dead right-field hitter is at bat, the shortstop should cover the bag on all attempted steals of that base.

13. The first baseman goes to the third base line between the catcher and the third base bag, the second baseman goes out toward right field but seeing the ball is to be caught comes back and covers second base, the shortstop covers third base the moment he sees the ball is to be caught, the third baseman backs up the shortstop deep in foul territory, the left fielder comes to the foul line not far from third base and the pitcher backs up third base between the assumed positions of the first and third basemen deep in foul territory.

14. The second baseman goes out toward right field for a possible relay throw; seeing that the ball is fielded cleanly by the right fielder he turns and backs up the shortstop who is covering the second base bag, the left fielder comes to the foul line not far from third base and the pitcher, deep in foul territory backs up the third baseman. The third baseman will take the throw. If he sees that it is impossible to get the runner coming from first base, he rushes toward the oncoming ball, catches it before it hits the ground, and throws to the shortstop covering second in order to keep the batsman from getting to a scoring position base.

15. The umpire did not know the rule. That part of the rule covering the fly is: "any attempt to bunt which results in a fair fly shall not be considered as an infield fly."

16. The third baseman should play well into the diamond in all bunt situations. He should also play well in when there is a fast, good bunter at bat.

The third baseman should play well back of the line any time a batsman has two strikes on him.

A batsman seldom bunts a third strike. The penalty which the rules inflict when he bunts a third strike which rolls foul is too great. He should also play well back when there is a dead left-field hitter at bat.

17. The hardest fielding play a shortstop has to make is on a ball hit by the batsman which bounds over the pitcher's head. This particular ball must be fielded by the shortstop on the run, and his throw to first base must be made under full speed, thrown from the position in which he fields the ball. It is impossible for the shortstop to set himself for a perfect throw.

18. Offensively I would have followed the rule: if an outfielder is coming in for a catch of a short fly ball just back of the infield, play a safe distance from the base.

Defensively I would have thrown the ball to the shortstop



covering second base attempting to make a force play on the runner coming from first base. The shortstop after catching the ball would probably throw the ball to the third baseman in an attempt to get the runner who was on second base.

19. The umpire made an error in his decision. "If the first runner returns to the base he left and both runners are occupying the same base, the second runner is the man out, if touched with the ball."
20. (a.) True. (b.) True. (c.) True. (d.) False. (e.) False. (f.) True. (g.) True. (h.) False. (i.) False. (j.) False. (k.) False. (l.) True. (m.) False.

21. a. Deep. It would not be unsound baseball to give the run, and it should be given in order to make an attempt for a double play, second base to first base. b. Deep or halfway. The run should be given if a hard hitter is at bat, the infield would play deep. If there is a weak batsman at bat, it would be advisable to play the infield moderately deep or halfway.

- c. Close or halfway. The run may be given, but in this inning it is better that it should not. The infielders should play close, or moderately deep according to the ability of the man at bat.

- d. Deep. It would be unsound baseball, regardless of the number of outs to play a close infield. The runner to keep away from the scoring position is the one on first base. Every effort on the part of the defensive team should be made to keep this runner away from second base, the scoring position.

- e. Deep. It would not be unsound baseball to give this run, thus allowing the game to be tied up, in order to avoid a possible winning run through the runner on first base getting to second, the scoring position. If the tying run were allowed to score, the home team would have an opportunity for breaking the tie in the last half of the inning. The batting ability of the players coming to bat for the home team must be considered in reaching a decision for the defense tactics of the infielders.

- f. Close. The run cannot be given.

- g. Deep. The infield should attempt to keep the batsman from reaching first base, thus eliminating the possibility of the winning run getting on base.

- h. Deep. If the ball is hit to the pitcher or the first baseman, providing that the first baseman is playing for a dead left-field hitter, a double play should be made or attempted catcher to first. If the ball is hit to the third baseman, the shortstop or the second baseman the double play would be second base to first.

22. A good eye is the most important. A proper stance is very important as it leads to the proper stride or step, maintaining a perfect weight balance and finally the correct swing of the bat.

23. The first and perhaps the most important thing about a young man learning to bunt is the fact that it is hard to convince him that he should bunt strikes and strikes only.

Second. Young men cannot form the habit of holding the bat loosely in their hands. They cannot get the idea that bunting a ball is very similar to catching it with one hand, the hand nearest the big end of the bat. Instead of catching it with that hand, he simply places the bat on the ball while the lower hand (the hand nearest the small end of the bat) acts as a guide.

Third. It is imperative that a bunter should have the bat under

perfect control. The arms should be away from the body well extended, the bat should be well in front.

24. a. Hit (unless lead-off man.) Swing hard attempting to make a long hit in order to get into a scoring position.
- b. The batsman should hit the good ball, using possibly, the hit-and-run play. This play should not be employed, however, if the offensive team is more than two runs behind.
- c. The batsman should hit the good ball, especially if he has the "hole" advantage on the pitcher.
- d. The batsman should hit the good ball.
- e. The batsman should by all means hit the good ball.
- f. The batsman should either hit straight away or take one strike. His batting ability would determine this. Every effort should be made to reach first base.
- g. If the ability of the batsman would prompt the hit-and-run play, here is the only legitimate situation. It should be used.
25. I would probably repeat to him a rule I had told the squad repeatedly; if the defense should make an attempt to catch the runner at first base there should be no hesitation on the part of the runner on second to steal third.
26. Touch or tag each base; never miss a bag in running the bases.
27. The pitcher, the catcher, the short-stop and the second baseman.
28. A base-runner should make every effort possible to reach third base when there is one man out, but he should never take the same chance to reach that base when there is no one or when two men are out.
29. It should be the first thought of the runner on third base to attempt to score on any ball hit to the infield. The principal reason for this action is to stop a double play if such is possible. If the ball being thrown by the infielder should reach the catcher before the runner crosses the plate, the runner should stop and run back and forth until the runner who was on first has reached third base and the batsman has reached second base.
30. When the caught fly makes the second out, the runner on second should be very careful in an attempt to reach third base. The defensive team might make a play at third base, and the runner coming from second might be retired before the runner has crossed the plate. Both runners should team up, and as soon as the ball is caught, they should both start for the base ahead; but the runner on second should be sure that the throw has no chance to retire him.
31. 1-7, 2-8, 3-6, 4-4, 5-3, 6-1, 7-2, 8-9, 9-5.

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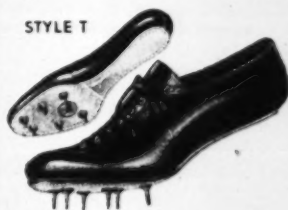
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Aquatic Forum

(Continued from page 24)

There is something artistic about diving. The neuro-muscular skills involved are always more or less artistic in nature. When I include definite standards in this definition, I mean there are certain rules and regulations by which we judge diving. They are stated definitely in our guide on swimming. The diver must express these neuro-muscular skills, these various movements, in the air according to definite standards and we have to judge those standards. The more experienced, the better he is able to judge the different movements—the ability to twist and turn and do the complicated movements in the air. What are the factors? There are three main factors, physical, mental and neuro-muscular ability.

We all know, and it is unfortunate to have to admit it, that if a boy has a well-proportioned body, he has a distinct advantage in diving competition and can make a better picture in the air. That factor has to be taken into consideration at all times. The boy is fortunate who does have straight legs, can point his toes well and has ability to retain his posture after long posing in the air.

The second factor is the mental factor. We know some people are more courageous than others and will likely be better divers—it does take a lot of courage. Another factor is the individual's attitude toward diving. Some like it and work hard, and have more ambition. All of these are mental factors. Perseverance, practice, long hours, etc., are very important. To illustrate what I mean by long hours of practice, Patterson of Ohio State worked every day except two days through the school year. That kind of attitude is certainly going to succeed. They must work hard and have the proper attitude before they can get far.

Neuro-muscular skills are tremendously important. Some can turn faster and twist better than others. You can teach them the elementary movements and progressions to the more complex movements. I do not know why it is that some can spin faster than others—it seems it is more or less in-born. Not because Patterson is from Ohio State, but I think he can turn faster on the forward somersault than any one in the country. He can do three and one-half somersaults from the 10-ft. board and get it just about every time.

We are going to have more specializing in diving, better specialists who will work on diving alone and not indulge in other sports. A result of better coaching and facilities will be better work. The Calhoun boy is an exception. Fifteen years ago you never saw boys of his age doing the dives he is doing now.

Question: On the back dive, can a man go down and up and then take a back dive, bounce the board? **Answer:**

No, that is against the rule. There is something in the rules about a crow hop. It is illegal. If that occasion would arise with one of my divers, I would take off points.

Question: Would it not be an advantage for a heavier man? **Answer:** I suppose he could get more lift, but it has always been the rule to take a single spring. We teach that and consider it best form. As a matter of fact, you could not control your dive as well. The crow hop has always been considered illegal. It is not a good technique in diving.

College coach obligations

John Miller of Mercersburg Academy, Pa., selected as a topic, "What a Prep School or High School Man Expects of a College Coach." Miller first posed the question, "How can college coaches help secondary school coaches?" and then went on to answer it.

There are three ways in which you (college coaches) can be of service to us. First, you can help us by sharing. By that I mean, you are all experienced in the field and you know that the boys of the prep and high schools will be your boys soon. Let us have the advantage of your deductions and findings from your research work. Many of you write articles; give us the gist of them for our monthly paper.

Second, you can help us by serving. There are many ways in which you can serve. Act in an advisory capacity. We look to you as the men who have gone through what we will have to go through later. We look to you for advice. Give us the benefit of what you know. If we knew it, we would not have to ask you for it. Give us lots of exhibitions, visit our schools, give talks and have your varsity men come over and assist with the running of meets. We have to operate on a limited budget. You will be doing a good piece of service to the secondary coaches. When you visit the schools you make a great impression on the boys—speak at every assembly—take every chance you can to meet the youngsters and talk to any of them. We need you and want you to come as a visitor, as a guest.

Third, having worthwhile objectives. I do not mean lofty ideas, but objectives that are practical, and things the average high school coach should do. Do not think of the one who is able to travel around the country, but the one who is not able to do as you do. They are average coaches teaching the boys that you will have later on and you must not disregard the average coach. Make the rules understandable and take away any awkward situations or misinterpretations. When you put in new events, we ask you to consider the coach who is way back in the hills—he cannot get to the meetings.

Physical Education Program

(Continued from page 22)

locker room chart is used for assigning lockers and keeping records.

Each student is required to take a shower after each class period in which he participates. Towels are brought from home and marked with the student's name. If he so wishes he may have the towel washed by the school at no cost. Uniform gymnasium costumes are also required and furnished by the student. The boys may have a white sleeveless shirt with blue trunks or an entirely grey suit. The girls are required to wear a one-piece blue suit.

Physical examinations are given to every student in the fall by a local doctor, and follow-up examinations are given by the school health nurse. Excuses from physical education are granted on the recommendation of a physician and those who are excused are assigned to study halls. Temporary and vocational excuses are granted by the high school principal. Excuses are not granted from personal hygiene classes.

Our intramural program is carried on for the benefit of both boys and girls. This program is administered by the physical education instructors and what other help they can obtain either from the faculty or student leaders. The intramural activities are carried on through class, club, and miscellaneous

groups. The program consists of basketball, football, softball, table tennis, fencing, boxing, wrestling, gymnastics, volleyball, track and field, gymnasium soccer. The games are played after school and awards are given for participation.

System of awards

In working out a system of awards, we tried to avoid all complex terms and situations. The results were very satisfactory. Our entire system follows. There shall be three awards: (1) Class numeral, 75 points. (2) Circle "H," 125 points. (3) Physical education "H," 200 points.

Points for participation are awarded as follows:

1. In all intramural league games a boy or girl must participate in 70 percent of the games scheduled for his (or her) team before he can receive any points in that sport. If this rule is complied with he shall receive 10 points. Additional points are awarded in the following circumstances: 5 points if his team wins the tournament, 3 points if they finish second, and 1 point for third.

2. Any other tournaments such as table tennis, badminton, etc. — first place, 10 points; second place, 5 points; third place, 3 points; fourth place, 1 point.

3. For boxing in any school authorized contest the participant receives 5 points. Winning adds an additional 5 points.

4. Participation in the North Montana wrestling tournament, 8 points. Winning adds an additional 7 points.

5. In fencing, tumbling, apparatus, or dancing, 8 points will be given for participation in any exhibition or demonstration presented by the physical education department.

6. Golf and hiking are not part of the program but 1 point per hour may be earned if these activities are under supervision of an adult. A minimum of 15 points per year is allowed.

7. Any activity not specifically covered may be awarded points according to the discretion of the athletic director.

8. Any students earning an award must have an average of "C" in at least three subjects and must be regularly enrolled.

9. A squad leader shall receive 10 points per 9 weeks period provided his work is satisfactory.

10. Points may be accumulative from sport to sport and year to year.

We have found that our program serves a purpose other than strictly physical education; that is, we find that by using small groups in special stunts and exhibitions that not only the school but the department is brought before the public. Our experience has been that the public enjoys watching a type of entertainment with which they are unfamiliar.

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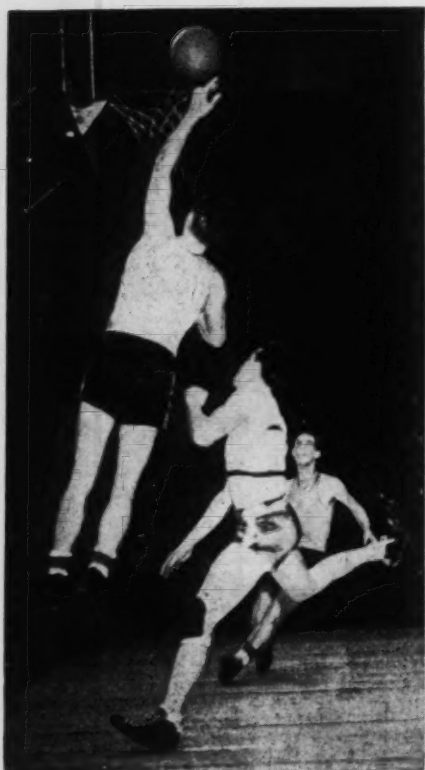
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Middle Distance Running

(Continued from page 9)

the result that the preceding adjustment is made before the start of the race. Thus we see the body is enabled to perform more efficiently directly after the race gets under way.

The minimum amount of warming up necessary will vary with different athletes; the exact amount necessary for different runners must be determined by experimentation. However, the writer suggests the following possibility: run from one-half to three-fourths of a mile, starting out slowly and gradually increasing the pace so that the last two hundred or three hundred yards are taken at a good clip, then conclude with one or two fast runs of one hundred to one hundred and fifty yards.

In competition many runners, especially novices, tend to give up just before they get their second wind. They should be encouraged to continue just a bit longer and plug for the silver lining.

Staleness and rest

Since the very nature of their endurance developing work calls for long periods of practice, middle-distance runners are continually faced with the danger of going stale. Most authorities classify staleness as either physical or mental. The former is invariably caused by prolonged and extreme fatigue. In other words the runner does so much work on the track that a night's rest is insufficient for complete recovery. Mental staleness is produced by a continuous repetition of the activity with a resulting dislike for it.

In either case the only cure is to stay away from the track for a while. When the runner again resumes practice he should limit his workouts so that he is doing very little hard work during the week. The best check a coach has on impending staleness in an athlete is to check up on his weight carefully. The individual who is steadily losing weight is burning up more energy than he is able to store up between practice sessions.

Thus we observe that rest, as well as exercise, is of prime importance in training for the middle-distance runs. By taking one or two days rest between the last hard workout and the competition, the runner's keenness for competition will not be dulled.

The amount of layoff advisable should be in accord with the time of the season. In early season meets one day of rest before the race should be sufficient, while two or even three days might be advisable at the end of a long, hard schedule. In any case the runner will gain little endurance for a particular meet by working hard right up to the day of competition.

With regard to sleep, all athletes should get at least nine or ten hours a night in a well ventilated room, and middle distance runners are no exception to the rule. The old adage that

two hours before midnight are as good as three hours after still applies. Following a night of sound, restful sleep the runner should arise in the morning thoroughly refreshed and ready for the day's work.

Tactics

In any discussion of training and conditioning for middle-distance running, it is not out of place to deal briefly on the tactics used in competition.

From the physiological standpoint, the ideal way to run either distance would be to run each portion of the race at an even pace; in other words, to run a half-mile in two minutes, would mean to run each 110 yards in fifteen seconds. However, such a procedure is well nigh impossible. Even so great a master of pace as the great Paavo Nurmi could not approach the ideal. Actually the first fourth of the distance is usually the fastest, with the last fourth the next fastest and the second and third fourths of the distance are usually covered in approximately the same time.

Most milers and half-milers use the crouch start and sprint the first fifty or sixty yards so that they may secure a good position at the start of the race and thereby avoid much fatiguing jostling about. A runner with a strong finish can stride along in second or third place, relieved of the mental strain of setting the pace. The athlete who does not possess a "kick" at the end of a race is forced to go out and set a pace that will wear the sprint out of his opponents. But at the same time he must avoid going out so fast that he runs himself into a state of exhaustion. Incidentally, continual practice at starting and sprinting will aid in developing a fair degree of finishing ability.

The runner should always maintain a position close to the pole, remembering that for every yard he runs from the curb he must run six yards more in each quarter mile. For the same reason he should refrain from passing an opponent while rounding a turn. When passing an opponent the runner should sprint for twenty or thirty yards. This will carry him well past the opponent and many times will preclude any fight by giving the impression that he is fresher than actually is the case.

When the last quarter of the race is reached, the middle distance runner should stride at full speed until he breaks the tape. If his energy has been so spread that his resources are well spent when he reaches the end, then the runner has run an ideal race.

The sprint in the final part of the race is accomplished by leaning forward, getting high on the toes and vigorously increasing the shoulder and arm action. An athlete well versed in racing fundamentals knows how to distribute his energy most economically, and is not thrown off by meeting challenges at inopportune moments.

New Books

METHODS IN PHYSICAL EDUCATION. By Jesse F. Williams, John I. Dambach and Norma Schwendener. Pp. 277. Philadelphia: W. B. Saunders Co. \$2.50.

COMpletely revised (second edition), this text on methodology in physical education is intended for the "new" student who is unfamiliar with methods of teaching physical education activities. But the book should prove as helpful to the "old."

The authors open their text with the problem of method, indicating its varying aspects. We are not to consider methods in physical education completely alien to those of general education, and the authors mention the contributions of general education to this field. In a discussion of formal and informal methods, the advantages of the latter over the former are enumerated. In the formal method there is greater flexibility of procedure in relation to objectives. The natural appeal of a program is an aid to procedure in that it is more likely to win the approval of the students (laws of learning).

A decided emphasis is placed upon the way in which the teacher conducts himself in a teaching situation, indicating the values of checking the teaching environment to improve the efficiency of instruction.

The psychological background of methodology is taken up by the writers, with a discussion of the values of drill, the role of emotions and the important problem of discipline.

The second section of the book is devoted to methods of teaching activities to young children, teaching calisthenics, gymnastics, dancing, swimming, games, and athletics. The authors present the early methods first and then lead up to present day methods. The references at the end of each chapter should prove of assistance to readers who are interested in follow-up work.

HYMAN KRAKOWER.

SWIMMING. By Victor E. Lawson. Pp. 82. Illustrated—photographs and free-line drawings. Philadelphia: J. B. Lippincott Co. \$1.50.

FOR both the beginner and the advanced swimmer, *Swimming* gives a clear picture of all the standard strokes, life-saving and water game instruction, exercises, and training hints.

Most of the illustrations for the various strokes are single action photographs but for the instruction on life saving, diving and water tricks, the author makes excellent use of a series of free-line drawings. Swimming men who are often called upon to teach the rudiments of the sport to small children, will find "Swimming for Children" a valuable chapter. Lawson believes that teaching children how to swim "is one of the easiest things in the world."

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From the States

(Continued from page 13)

14. Boys who finish 1, 2, 3 in each class will be awarded belt buckles by the State Association.

The state board of control went on record as opposed to any high school boy playing more than one game of basketball during the same evening. It was brought out that sometimes in doubleheaders a few boys would play in part of the first game and all of the second. This constitutes too much basketball for any high school boy and if persisted it will result in a restraining regulation.

The board took no action on a proposal to fix the maximum number of games per season at 20, and not to permit practice before November 1. A fixed date for practice, it was thought, would be inadvisable due to so many small schools not having any fall athletic program other than basketball.

The suggestion that a high school boy who is not a member of a regular high school swimming team be barred from the district and state tournaments also received no action by the board. Last year's regulation, that no boy be permitted to enter any district or state meet unless accompanied by a faculty representative or someone designated by the principal in writing, still applies. The board did not take any action on a proposal to fix a date for swimming practice, and a move to forbid independent post-season participation.

Results of questionnaire

Exactly 846 member schools voted on the following questionnaire:

1. Enlarging the district boards. Do you favor this proposal? (Yes, 605; No, 192.)

2. Girls' interscholastic basketball. Does your school maintain the sport interscholastically? (Yes, 363; No, 450.) Does your school maintain the sport intramurally? (Yes, 563; No, 197.) Do you favor dropping it interscholastically? (Yes, 517; No, 250.) Of the 363 maintaining girls' interscholastic basketball, 165 favor dropping it and 184 do not, with 14 not voting.

Kentucky

State officials for finals

THE state board of control has decreed that all officials used in the state basketball tournament this year must be *bona fide* residents of the state, and the interest and class of officiating should improve as a result. This move has been well received. Heretofore, the officials have come from Cincinnati, Ohio, and in some instances from Nashville, Tenn.

St. Xavier High School of Louisville is at present the outstanding quintet in the state. The team has decisively beaten all the other top ranking fives, and has shown no signs of weakening in the stretch.

The new basketball rules have met with universal approval in this state. The most common objection is that the game is too strenuous. However, it has provided an opportunity for most teams to use many players instead of just five. There is nothing in the rules to prevent a team from using a slow break when they have the ball, but the majority of teams prefer the fast break type of game, and have found that the crowd likes it.

Proposals for new changes

Russel Bridges, a member of the board of control and assistant principal of Highlands High School in Ft. Thomas, has proposed many new changes in the present state regulations in a letter to all schools that are members of the High School Athletic Association. The proposals are to be voted upon at the regular meeting in Louisville in April.

Mr. Bridges has made a complete study of the athletic set-up in many of the mid-western states and his proposals are a result of that investigation. Some of his proposals call for: athletic insurance similar to that in Wisconsin, division of the state into four districts to use as a basis in determining championships in all major and minor sports (with the exception of basketball), more support from the Athletic Association to the Coaches Association in promoting summer coaching schools for the members, and also for a system of registering and grading of officials for athletic contests.

The state has come a long way toward modernizing its rules and regulations governing athletic contests since the 20-and-8 rule was adopted in 1933. Other improvements are sure to follow this coming year and one of them may be a provision for the establishment of a permanent secretary.

WILLIAM J. "BLUE" FOSTER,
Kentucky H. S. Coaches Ass'n.,
Newport, Ky.

Wisconsin

Tournament statistics

LAST year the class in physiology of exercise of the University of Wisconsin under the direction of Professor Nohr, conducted an intensive study during the state basketball tournament to determine the actual playing time of the individual participants as well as the distance traveled by each player during the course of the games. With all the new rules this year, it will be interesting to compare the 1937 results with those of 1938.

The study was conducted on the following plan. During the progress of the various games, time was taken out and time again started when actual play was resumed under the following conditions: at any time-out period, at

all out-of-bounds plays, during all free throws, during time taken by players in walking from end of court to center jump circle or jumping between players at any time, and at all called time-outs by officials.

The statistics of the individual games were taken under the following groupings: class of competition (A, B, C), according to quarters, according to position of players, time of day played.

Conclusions

The following pertinent as well as interesting figures were developed.

1. The first and third quarters produced a smaller active percentage than the second and fourth quarters.

2. The fourth quarter was by far the most active.

3. The Class A games produced an actual playing percentage of 76.19, the B group 72.55 and the C record 74.94.

4. The time of the game did not influence the active time of the individual.

5. The distance traveled by the individuals varied according to position played and their type of coaching.

6. The following gives the average traveled by players of equal positions in the three classes:

	Forwards	Centers	Guards
A.	2,768 yds.	2,925 yds.	3,644 yds.
B.	3,578 yds.	2,755 yds.	3,078 yds.
C.	3,074 yds.	2,997 yds.	2,658 yds.

Idaho

Eight teams in finals

THIRTY-EIGHT basketball teams are competing for the right to enter the state Class A tournament to be held

at Boise on March 17, 18 and 19. Six district tournaments will be held and eight teams selected for the state tournament. Boise High School as host school will not have to compete in a district tournament in order to compete in the finals. Two teams will be selected from the south-central district and two teams from the district in which the state tournament is held, Boise High School being one of the teams in the latter district.

One hundred and twenty-eight Class B teams will compete in six district tournaments for the privilege of playing for the Class B championship.

A basketball clinic will be held in connection with the state tournament with Edward Hoshaw, assistant coach of Boise High School, as chairman. Forrest Twogood, basketball coach at the University of Idaho, will talk on "Offensive and Defensive Basketball," Guy Wicks, basketball coach at the University of Idaho, Southern Branch, will present his viewpoint on "Game Skills—Guarding and Shooting;" and Pat Page, coach at the College of Idaho, will discuss "Coaching Units and Drills." All coaches in the state and anyone interested in basketball may attend this clinic.

Six men have been selected to determine an all-tournament basketball team at the Class A tournament: Ted Bank, football coach at the University of Idaho; Orville Hult, coach at the Albion Normal School; George Greene, coach at the Lewiston Normal School and the three men who will speak at the basketball clinic. Another committee will pick an all-star team in the Class B tournament.

E. F. GRIDER,
Idaho H. S. Athletic Assn.,
Boise, Idaho.

Tips on Batting

(Continued from page 7)

angle to correct one particular fault. The weight of the concrete rollers gives the mirrors balance in a wind or breeze.

Even so they have to be handled carefully because the broad expanse of mirror is a good target for a sudden gust of wind which may tip it over with dire results.

Each player steps into the batter's box, takes his stance and swings at imaginary pitches. If his form needs correcting, it is done at this time. The batter sees himself in the mirrors before and after the swing. He can notice his stride and step, whether it is too long or too short. Also he can see whether his swing is level and whether he follows through completely.

From here he goes to the diamond where he takes part in actual batting practice. If he is hitting ahead of the ball, not using a level swing or, through some other fault, is not getting power, he is shown the proper method and sent back to the mirror. And before it, he can adjust his

stance, swing or follow through, whichever is necessary to eliminate his fault.

A home plate is placed ten feet in front of the direct mirror, or the one in front of which the batter would stand if he were facing a pitcher. The other mirror is placed at the batter's back. The mirror is also used to correct faults and show proper form in bunting and pitching.

Hints on hitting

1. Keep your eye on the ball. When attempting to hit the ball, follow its course from the time it leaves the pitcher's hand to the catcher's glove.

2. Always be in a position and ready to hit. Don't be moving the bat when a pitcher is about to deliver the ball.

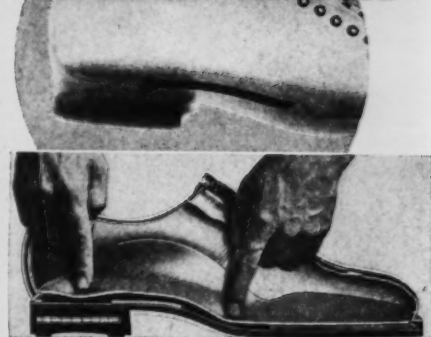
3. Have confidence when facing a pitcher.

4. Be sure to hit good balls.

5. Hit the ball in front of you.

6. Be sure to follow through.

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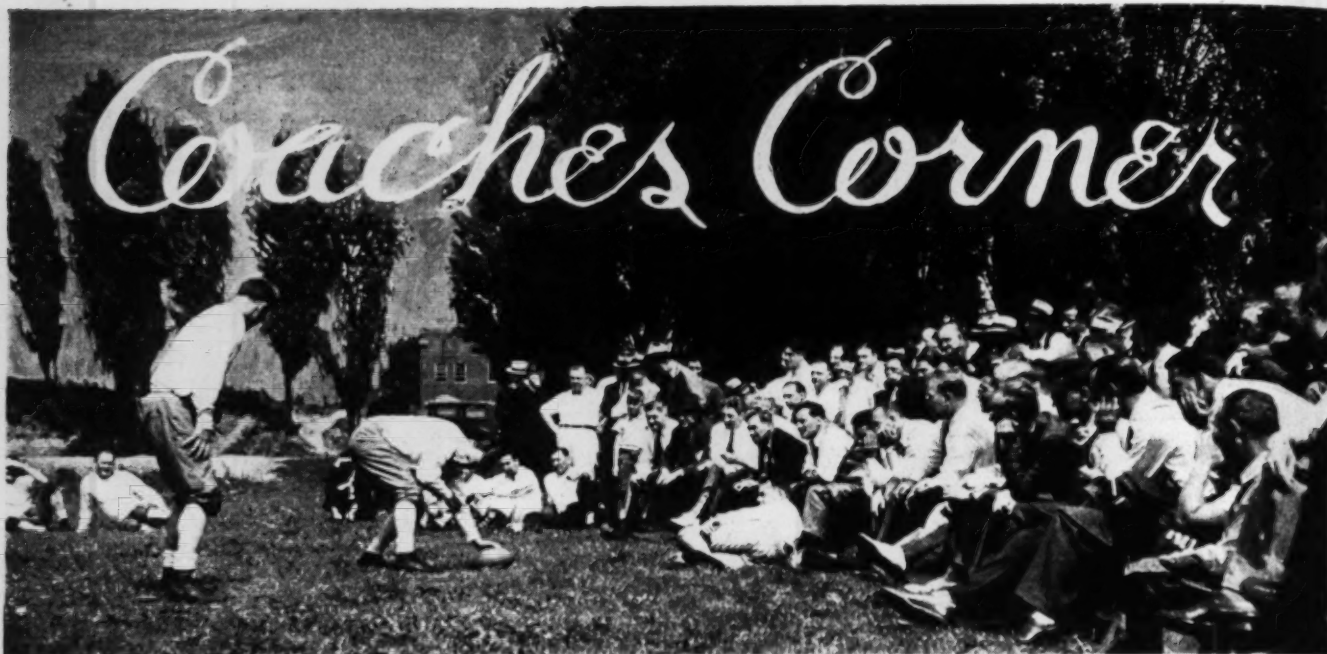
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If you have something for this column send it to Bill Wood, University High School, Iowa City, Iowa.

The prize for the month goes to Mark Almli, considered throughout the Northwest as one of the greatest dribblers the game has ever known. He coaches at Eau Claire, Wis., where his team is undefeated so far this season, but he tells this story about the troubles of Tony Parkovich, former star at Eau Claire Teachers' College, who is now coaching at New Auburn, Wis.

"Tony started this season with a string of nine consecutive victories. During the week preceding the big game with Bloomer, his star forward, 'Sonny' Olson, married the cheerleader and both dropped out of school. The double loss was too much for the team to stand. Bloomer handed New Auburn its first defeat of the year, 24 to 16."

It finally happened. After four years the Plowboys of John Tarleton College, Stephenville, Tex., lost a basketball game. They had won 84 in a row, but the San Angelo "Rams" weren't impressed and took them into camp, 27 to 26. San Angelo was also the last team to defeat the Plowboys back in 1933.

On the other hand, Washington (Iowa) High School recently suffered its fortieth straight defeat. That must be a new low for the nation. Odd how material runs in cycles. The Washington Junior High team as well as the Junior College outfit are both of championship caliber.

Add high scorers. When Benson High of Omaha defeated Thomas Jefferson High of Council Bluffs, 53 to 32, Jerry Dutcher, Omaha's star center, scored 41 points.

The experts who picked Louis over Schmeling ought to get in touch with Louis Dautremont, coach of St. Mary's

of Riverside, Iowa. Before the county tournament this year, he picked the winners and the scores of both teams and posted them. He missed one score by four points and remarked, "I guess I must be slipping!"

They grow 'em tough in the Blue Valley League down in Riley County, Kans. Coach R. W. Kay of Cleburne Rural High writes: "While playing the ball and the man at the same time, a boy on one of our county teams recently rammed heads with a teammate and split open his eyebrow. Later the center on the same team did the same thing. In each case it was the left eyebrow that required the stitches."

Out at Sunrise, Wyo., Mr. Frank G. Schultz, supt. of schools, is making a study of the number of games which should constitute the football and basketball season for the small high school. "We are interested in schools in which the squad of available players runs between 15-25 men and in which certain players will participate in all of the important games. We are interested in this problem from the standpoint of the health of the players and the general effectiveness of their performance."

If any of you have suggestions to offer, get in touch with Mr. Schultz. The problem involved is a vital one.

Coach Gene Barry of Conception, Mo., Junior College also has his problems. With a squad of eight players he has one of the most difficult schedules in the state, including games with St. Benedict's, coached by Marty Peters, Haskell, Trenton, and Quincy College. He hopes that the center jump will come back next year.

One of the best "success-under-difficulty" stories comes from Coach Lewis School of De Witt, Ark. "With a football squad of 18 players we won seven out of ten games this year. We did not hold a single scrimmage nor get a boy

injured during the whole season." That is a record!

On a squad of fifteen, Coach Lee Brooks of Virgin Valley High, Bunkerville, Nev., has three sets of brothers and two sets of cousins. The brothers are Melbourne and Gerald Jensen, Chester and Cleave Barnum, Dillworth and Arthur Strassen; the cousins are Arthur and Owen Hughes, Rodney and Orley Waite. With one exception each regular has a brother on the squad. Who wants to start something?

Some interesting items come from Coach A. Warren Angstadt of the Thomas Ranken Patton Masonic Institution for Boys, Elizabethtown, Pa.

"Although our football team lost all four of its games last fall, it did make some kind of a record by completing 55 out of 72 forward passes.

"There are 58 boys enrolled in our school ranging in age from fifteen to eighteen years. Approximately 25 report for football each season.

"The unusual difference in weight between two of our players caused quite a stir in this section last fall. The heaviest man on the team, 'Tiny' Peistrup, regular center, tipped the scales at 277 pounds; the lightest player, Wayne Werkheiser, reserve halfback, weighed only 112 pounds."

The Associated Press calls attention to the boys playing under Coach Raymond Jenkins at Ohiowa, Neb. His first team includes Hurley, Bornschlegl, Rasmussen, Bahe, and Schelbitzki. The second team lists exactly the same names. In other words Coach Jenkins has four sets of brothers and a set of cousins to work with.

Lorimor, Iowa, boasts of an uncle and a nephew on its high school quintet. Vernon Frey, 6 ft. 5 in. center, is the leading scorer on the team. His uncle, Merlyn Frey, 5 ft. 6 in. forward, is content to "feed" his nephew under the basket.

J. A. Leitze, former highly successful coach at Murrayville, Ill., High School, recalls a season when he had two uncles and a nephew among his regulars. The nephew, Benny Wright, high scoring forward, was older than his uncles Harlan and Francis Doyle, center and guard respectively.

Thanks are due Coach Pete Knudsen of Ogden, Iowa, for the next three.

"About seven or eight years ago Anthon, Iowa, was playing football at Kingsley, a nearby town. Anthon had just started football in their school and did not seem to be functioning very well against their more expert opponents. With the score 40 to 0 against them, and with Kingsley once more in possession of the ball on the two-yard line, Anthon called time out. After he had caught his breath, a red-headed, freckle-faced Anthon boy turned to the referee, Coach 'Honie' Rogers of Morningside College, and asked, 'How much time is there left?'"

"'About two minutes, sonny.'"

"Turning back to his buddy sitting beside him, Red said, 'Gosh, Jack, I don't believe we've got a fighting chance!'"

"**When Coach Ival Outhouse** of Bronson, Iowa, played forward on the Moorhead High School team back in 1931, he scored more points than all of his team's opponents put together. Opponents' total, 431; Outhouse, 493. A 19-point average for 26 games isn't the easiest thing in the world to achieve."

"**The same Moorhead team** won two games in the Monona County Conference by shut-out scores. Both victories were at the expense of Castana, 62-0, and 74-0. Castana missed free throws in each game and tried desperately to score throughout."

For two years Ray Eliot coached Illinois College close to the top of the Little Nineteen Conference, but was nosed out in one game each time. Last year he left to take over the assistant football job at the University of Illinois. The boys he left behind under the able leadership of athletic director LaRue Van Meter came through to tie Bradley Tech for the Conference title. For his services during the preceding years the football squad of Illinois College presented their former coach with a miniature gold football. During Eliot's five years at "Old Illinois" his baseball and swimming teams won eight championships.

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Even the girls have their shut-outs. The belles of LuVerne, Iowa, recently put one over on Vernon Consolidated of Renwick, 42-0.

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New York, N. Y.



ORGANIZED SPORTS IN RUSSIA

By Gerald G. Reed

Swimming, volleyball and (soccer) football are highly popular sports; calisthenics are favorite mass drills.

In the Soviet Union, organized sports for the general public is only a development of the past 15 years. It is estimated at present that close to ten million men and women engage in some form of organized physical education. During his summer vacation in the U.S.S.R., Gerald G. Reed, football coach at the community high school in McHenry, Ill., had an excellent opportunity to observe the Soviet's sports program at close range.

VACATIONING in the Soviet during the past summer, I was considerably surprised when an American traveler, with whom I was chatting in the lobby of the Hotel Metropole in Moscow, invited me to go to a football game with him. I didn't know football was a Soviet sport, and accepted his invitation readily. The game drew a crowd of 110,000 to Moscow's huge Dynamo Stadium, one of the new giant structures by which the U. S. S. R. is attempting to prove to the world that it is a nation in step with the march of modern ideas.

Soviet "futeboll" was a good game, but it was not football in the American sense of the word. It was simply our soccer. Nothing more. A good, but costly, joke on us since my friend had exchanged good American money for a bucketful of rubles with which to buy the "football" tickets. However they played the game well, exhibited almost as intense a technical application to the game as American football players, and the reaction of the crowd alone was worth the price of admission. The visiting team were the champions of Loyalist Spain, and the locals the champion Dynamo team of Moscow.

The Spaniards won. They used an intricate, short pass, fast-moving attack that proved entirely baffling to the Russians. The local team seemed to lack individual resourcefulness and the ability to make snap decisions. And there, I thought, was one of the fundamental differences between Russian and American athletes.

Equal rewards

The game recalled a speech I heard some years back at an Illinois teachers' meeting in Evanston. A speaker made mention of the communistic precept which holds that all should share alike. Schoolboys running a 100-yard dash, for instance, should all receive the same reward no matter how they finish. The speaker maintained that this would not elicit the best efforts from students; that it would stifle individual initiative and industry in school the same as it would in society.

From observations in the U. S. S. R., however, it would seem that the idea of equal rights for all workers or competitors has been modified considerably. The Soviet has forsaken its original stand and accepted, in part at least,



A crowd of 110,000 watched the champions of Spain defeat the local team in the Dynamo Stadium.

the historic practice of different rewards for different grades of achievement.

The winner of the race would now receive a greater prize than the fellow who ran second. This is also being done in industry. There is a Stakhanovist group in industry who receive more pay than their less skilled fellow workers. Soviet leaders claim that the Stakhanovites are motivated not by a desire for extra wages but by a desire for the general welfare of the Party and the success of the Five Year Plan. But it definitely seems a trend toward the capitalistic practice of wage differences and bonuses for greater production.

Tribute to the English

"The Battle of Waterloo," historians tell us, "was won on the cricket fields of England."—a tribute to the dauntless competitive spirit of the English. This spirit is instilled through competitive sports conducted on the highest level, where there are no other factors involved but the game itself.

The Soviet government believes that sports improve the civic morale and the adaptability of citizens to the army. Consequently they encourage all types of athletic activity. Russians with whom we discussed this matter maintained that this emphasis on sports was not for the purpose of improving the physical condition of the army, but to improve national health and general welfare. But I left with the impression that it was for military welfare.

Almost every European nation ap-

parently has the same idea. Sports lend themselves well to pageantry, and perpetual pageantry keeps aflame the strong nationalistic spirit for which dictatorships strive. Both Hitler and Mussolini run this type of show for the public.

On a railway diner leaving Warsaw, I ran into R. W. Stepp, swimming coach of Princeton University who, at the time, was busy organizing the Polish youth into swimming clubs. The government's purpose in having him organize the clubs, he said, was for the general welfare of the public. But I believe the government also had a weather eye out for improving the physique of potential army recruits.

This appears to be the attitude of most European nations towards sports. But it seems to me that they are overlooking an important factor. "The Battle of Waterloo was won on the cricket fields of England," but the competitive spirit on the cricket fields of England, was quite different than the spirit shown by these youths in their exercises. They play their games as if they were work. I have watched them many times where the players kept no score and apparently had no concern for good plays.

Volleyball popular

Volleyball is popular throughout the Soviet. I have seen several games where they made no use of boundary lines and did not seem to care whether the ball went in bounds or not. Sometimes they did not particularly care

whether the ball was returned over the net or not. They just batted it.

On the boat back to Leningrad, the ship's officers played deck tennis in much the same manner. However, I may be unfair in this criticism. They may have different ways of respecting proficiency. Anyway they took great pride in the captain's skill at the game.

At the Dynamo Stadium in Kiev I saw a 1000-meter race in which the competitors were straining every muscle and nerve to win. They were running barefoot on a cinder track and did not hold back because of the pain. In the next race, several girls ran 500 meters. They were just as eager as Americans to run a good race.

In the Dynamo gymnasium there was a weight-lifting contest between 18-year-old boys. The competition was really intense. And the ovation accorded the winner was as spontaneous and hearty as American plaudits. In a "Park of Culture and Rest" in Moscow I saw wrestling in which the competition was equally as intense. The wrestlers won as soon as they dropped their man to the ground; they did not have to pin his shoulders.

In this same park I watched several tennis matches in which the players' sole object apparently was to hit the ball. It did not matter where they hit it or how. But they are striving to learn. The government encourages tennis, and probably considers the game a sign of modernism and national progress. They hold it up to the people as if it were further evidence that Soviet leaders have brought to the masses privileges which only the nobility enjoyed before. The French veteran, Henri Cochet, was holding public tennis classes in Moscow and Kiev when we stopped there.

An Englishman from Wimbledon, watching a public tennis instructor and his pupils in a park in Moscow, remarked to me, "The chaps have no conception of it, have they?"

Culture and rest

What constitutes "culture" and "rest" in these parks is an interesting speculation. The athletics conducted therein undoubtedly are considered part of the culture. There are classes in wrestling, tennis, volleyball, folk dancing, calisthenics, and swimming. In the parks' amphitheaters, bands and orchestras play classical music; good plays are presented in the open-air theaters. They also have the "Kino" (cinema) in children's theaters and enclosed halls.

The "rest" is probably connected with the park benches such as we have in America. There are few good lawns on which to recline. The sod is bad and grass is sparse, although they are making valiant attempts to grow it.

Mass calisthenics

Everywhere—in parks, school yards, children's summer camps, and on the grounds of Soviet Pioneer clubs—they drill at calisthenics. This is perhaps

their leading form of physical activity, next to soccer or "futeboll." The government encourages it. Calisthenics make good mass drills and therefore lend themselves well to the mass action, pageantry and mob demonstrations by which the communist leaders are constantly whipping up the patriotism of the people.

At Artek, a summer camp for children on the Black Sea, some of the finest calisthenic drills in the world are staged. Artek is a camp for the Pioneers, an organization similar to our Boy Scouts except that the Pioneers

are closely connected with the government.

What, no baseball

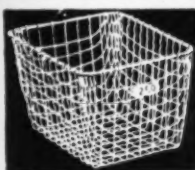
Baseball, America's national pastime, is unknown in the U. S. S. R. I spent hours searching for a foreign newspaper or a news item in a local paper that would carry baseball news, to see how the Cubs and Giants were doing. But my search was to no avail. News of the execution of some "enemy of the people," of the Spanish Loyalists, or how

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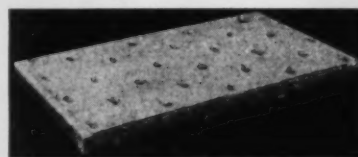
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Sprint Start

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6. The left leg applied force to the block 1.92 times longer than the right.

7. Starting time on the basis of right leg movement is $.2807 \pm .0038$ s.

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It is of interest to note that starting time (back foot) correlated against the elapsed time between the gun shot and the initial application of pressure by the back leg (this might be termed reaction time) resulted in a correlation of $.3959 \pm .0592$. The correlation between starting time (back foot) and the duration of the application of pressure gave $.8413 \pm .0197$. This seems to indicate that a higher degree of relationship exists between starting time and the duration of driving force than between starting time and reaction time to the report of the starting gun.

Attention is also called to the fact that in 4 cases pressure was applied

first by the front leg. Since these responses are exceptions to the rule, it is interpreted as meaning that these men would do better if their feet were reversed at the start of the sprint.

Conclusions

On the basis of data collected from 29 varsity sprinters relative to the execution of force by the legs at the start of the sprint, the following conclusions are drawn:

1. The forward propulsion of the body at the start of the sprint is initiated by force applied by the back leg.

2. The body is propelled forward by both legs acting simultaneously during the first half of the driving phase.

3. The front leg alone applies forward force to the body during the last half of the driving phase.

The coaching point involved is this: The sprinter not only must apply pressure with rapidity, but also must apply maximum force over as long a period of time as good form permits. The movement desired is not a speedy slap, but a prolonged forceful push.

Russian Sports

(Continued from page 39)

Citizen Stankowski did a fine job in increasing the wheat yield of the Party—but no baseball news.

Basketball is slowly making headway. I saw basketball courts of fair construction in the gymnasiums in Kharkov, Moscow and in some of the other larger cities. But I did not see any actual scrimmage, since the game isn't played during the summer.

Swimming is tremendously popular. The people swim everywhere: in muddy little ponds on the outskirts of Leningrad and Moscow, along the great rivers and on the shores of the Black Sea in the south. I saw thousands of brown bodies splashing in the equally as brown waters of the Volga River, from Gorki in the north to Stalingrad 1500 miles to the south. At Stalingrad, Kiev and Odessa, huge crowds waited in line for hours for excursion boats and trolley cars to transport them to the beaches.

Sports Days

Moscow held a huge Sports Day while I was there, to which delegations of athletes were sent from every province and region of the U. S. S. R. There were long parades, mass drills, mass calisthenics and gymnastic demonstrations. During the summer, similar sports days were held in other key cities. The high degree of enthusiasm that was manifested was more or less definitely identified with The Party. They gave foreign tourists the impression that sports day was merely another excuse for a public demonstration of Party loyalty.

So football, or soccer, remains the one competitive sport played on a large scale. We saw the Spanish boys again at Kiev where they played two games against the champions of the Ukrain, drawing crowds of 60,000 to 70,000. The Russian spectators cheered the Spaniards as often as their own players. A good play by either team was applauded.

This may have been due, however, to the nature of the opposition, for the people are extremely interested in the fortunes of the Loyalist party in the Spanish civil war. They did everything possible to convince the visitors of their friendship and sympathy. At our hotel that evening the Spaniards were banqueted in regal fashion. We had the good luck to dine at the same time in the same room.

The dining room was luxurious with tall mirrors, heavy velvet drapes, deep rugs and all the heavy luxury of the old royalist regime. They feasted the boys richly, even down to several brands of Spanish wine and big, black cigars.

The Russian players, on the surface, did not show as much individuality and self-reliance as the Spanish. That is the one thing I noticed about Soviet sports in general. American sports, I believe, do promote individualism.

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